



# California Regional Water Quality Control Board

## Central Coast Region



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Arnold Schwarzenegger  
Governor

**ORDER NO. RB3-2008-0059**

**NPDES NO. CAG993003**

### **WASTE DISCHARGE REQUIREMENTS NPDES GENERAL PERMIT FOR DISCHARGES FROM AQUACULTURE FACILITIES AND AQUARIUMS**

**Table 1. Administrative Information**

This Order was adopted by the Regional Water Quality Control Board on:	<b>December 5, 2008</b>
This Order shall become effective on:	<b>December 5, 2008</b>
This Order shall expire on:	<b>December 5, 2013</b>
New dischargers seeking coverage under the General Permit for the first time, as well as dischargers authorized by Order No. R3-2002-0076, shall file a Notice of Intent (NOI) form to be covered by this Order in accordance with section VI. A. 2 of the Order.	

IT IS HEREBY ORDERED, that Order No. R3-2002-0076 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, authorized dischargers shall comply with the requirements in this Order.

I, Roger Briggs, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on December 5, 2008

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Roger W. Briggs, Executive Officer

## Table of Contents

I.	Facility Information .....	3
A.	Industry Description .....	3
B.	Pollutants of Concern.....	3
II.	Findings.....	4
III.	Discharge Prohibitions.....	9
IV.	Effluent Limitations and Discharge Specifications .....	10
A.	Effluent Limitations.....	10
B.	Land Discharge Specifications.....	10
C.	Reclamation Specifications.....	10
V.	Receiving Water Limitations.....	10
A.	Surface Water Limitations.....	11
VI.	Provisions.....	13
A.	Standard Provisions.....	13
B.	Monitoring and Reporting Program (MRP) Requirements .....	14
C.	Special Provisions.....	14
1.	Reopener Provisions.....	14
2.	Special Studies, Technical Reports and Additional Monitoring Requirements.....	15
3.	Best Management Practices and Pollution Prevention .....	16
4.	Construction, Operation and Maintenance Specifications.....	18
5.	Special Provisions for Municipal Facilities (POTWs Only) .....	18
6.	Other Special Provisions.....	18
7.	Compliance Schedules .....	19
8.	Solid Waste Disposal.....	19
VII.	Compliance Determination .....	20

## List of Tables

Table 1.	Administrative Information .....	1
Table 2.	Basin Plan and Ocean Plan Beneficial Uses .....	6
Table 3.	Final Effluent Limitations.....	10
Table 4.	Toxicity Reduction Evaluation—Schedule .....	16

## List of Attachments

Attachment A – Definitions .....	A-1
Attachment B – Map .....	B-1
Attachment C – Flow Schematic.....	C-1
Attachment D – Standard Provisions.....	D-1
Attachment E – Monitoring and Reporting Program (MRP) .....	E-1
Attachment F – Fact Sheet.....	F-1

## **I. FACILITY INFORMATION**

### **A. Industry Description**

This Order (General Permit) is intended to authorize and regulate similar discharges from aquaculture facilities and aquariums (facilities that contain, grow, hold, or study aquatic species) to ocean waters of the State within the Central Coast Region. There are currently five dischargers authorized by the General Permit, including two research facilities and three commercial aquaculture facilities.

The UC Davis Marine Pollution Studies Laboratory (MPSL), which conducts applied toxicology research, is authorized by the General Permit to discharge to the ocean approximately 8 miles south of Carmel along the Big Sur coast. Physical facilities at the MPSL include laboratory culture buildings, toxicity laboratories, a dishware cleaning and sample storage facility, office buildings, and a sample sorting shed. The UC Santa Cruz Institute of Marine Sciences, a marine research and education facility that uses a 1,000 gallon per minute (gpm) seawater delivery system to supply pens, pools and laboratories, is authorized by the General Permit to discharge to the ocean near Santa Cruz. The largest commercial aquaculture operation authorized to discharge by the General Permit is The Abalone Farm, Inc., which annually produces an average of 150,000 pounds of abalone in a flow-through seawater system and discharges to the ocean near Cayucos in San Luis County. Also currently authorized by the General Permit are Cultured Abalone Ltd and Silverking Oceanic Farms, Inc., which produce abalone and salmon in flow-through seawater systems in Santa Barbara and Santa Cruz Counties, respectively.

### **B. Pollutants of Concern**

Facilities authorized by the General Permit may discharge a variety of pollutants attributed to: (1) feeds, directly or indirectly (feces), (2) residuals of drugs used for maintenance of animal health, and (3) residuals of chemicals used for cleaning equipment or for maintaining or enhancing water quality conditions. Such pollutants can contribute solids and nutrients to receiving waters; and chemical and drug residuals raise concerns regarding toxicity of the discharges and the promotion of resistance to antibiotics.

### **C. Eligible Discharges**

The General Permit is intended to authorize and regulate similar discharges from aquaculture facilities and aquariums – facilities that contain, grow, hold, or study aquatic species, to ocean waters of the Central Coast Region. Examples of eligible discharges include those from abalone growing facilities, steelhead trout rearing facilities, salmon rearing facilities, marine mammal laboratories, and aquariums. Suitability for coverage under the General Permit is determined on a case-by-case basis by Regional Water Board staff; coverage is allowed if the discharge meets the terms of the permit.

The following discharges shall not be considered eligible for coverage.

1. Discharges that contain constituents for which the receiving water is listed as 303 (d) impaired.

2. Discharges that can reasonably be expected to contribute to a violation of an applicable State water quality standard.
3. Dischargers to inland surface waters, enclosed bays, estuaries, and groundwater.
4. Discharges that are entirely, or in part, of domestic origin.

## II. FINDINGS

The California Regional Water Quality Control Board, Central Coast Region (hereinafter the Regional Water Board), finds:

### A. Background.

1. On September 22, 1989, a Memorandum of Agreement executed by the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Water Board) authorized and established procedures for the State Water Board to issue general National Pollutant Discharge Elimination System (NPDES) permits pursuant to NPDES regulations at 40 CFR 122.28 and 122.44.
2. NPDES regulations at 40 CFR 122.28 and CWC Section 13263 (i) authorize the Regional Water Board to issue general NPDES permits and provide for the issuance of general waste discharge requirements for categories of discharges, which:
  - a. Involve the same or substantially similar types of operations;
  - b. Discharge the same type of wastes;
  - c. Require the same type of effluent limitations or operating conditions;
  - d. Require similar monitoring; and,
  - e. Are more appropriately regulated under a General Permit rather than individual permits.
3. On September 20, 2002, the Regional Water Board adopted Order No. R3-2002-0076 (General NPDES Permit No. CAG993003) – Waste Discharge Requirements / NPDES General Permit for Discharges from Aquaculture and Aquariums. The Order included, as Attachment A, Monitoring and Reporting Program No. R3-2002-0076, which was subsequently modified on September 7, 2007. This Order reissues the General Permit, including its accompanying Monitoring and Reporting Program.

**B. Industry Description.** This General Permit is intended to authorize and regulate similar discharges from aquaculture facilities and aquariums (facilities that contain, grow, hold, or study aquatic species) to ocean waters of the State within the Central Coast Region. Facilities authorized by the General Permit may discharge a variety of pollutants attributed to: (1) feeds, directly or indirectly (feces), (2) residuals of drugs used for maintenance of

animal health, and (3) residuals of chemicals used for cleaning equipment or for maintaining or enhancing water quality conditions.

**C. Legal Authorities.** This Order is issued pursuant to CWA section 402 and implementing regulations adopted by USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a general NPDES permit for point source discharges from aquaculture facilities and aquariums to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260).

**D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements of this Order based on information required by monitoring and reporting programs and experience gained through administration of Order No. R3-2002-0076. Attachments A - F, which contain background information and rationale for requirements of the General Permit, are hereby incorporated into this Order, and therefore, constitute part of the Findings for this Order.

**E. California Environmental Quality Act (CEQA).** Pursuant to Water Code section 13389 the action to adopt waste discharge requirements (as in this action to reissue waste discharge and NPDES requirements for discharges from aquaculture facilities and aquariums) is exempt from the provisions of the CEQA, Public Resources Code sections 21100 - 21177.

**F. Technology-Based Effluent Limitations.** CWA Section 301(b) and USEPA's NPDES regulations at 40 CFR 122.44 require permits to include, at a minimum, applicable technology-based limitations and conditions. CWA section 402(a)(1) and NPDES regulations at 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology based limitations on a case-by-case basis when Effluent Limitations Guidelines are not available for an industrial category and/or pollutants of concern. When BPJ is used, permit writers must consider specific factors outlined at 40 CFR 125.3.

This Order incorporates technology-based requirements from the *Effluent Limitations Guidelines for the Concentrated Aquatic Animal Production Point Source Category*, established by USEPA at 40 CFR Part 451, and it establishes technology-based requirements using BPJ, where the *Effluent Limitations Guidelines* would not be applicable to dischargers authorized by the Order. A detailed discussion of development of technology-based effluent limitations is included in the Fact Sheet (Attachment F).

**G. Water Quality-Based Effluent Limitations.** CWA Section 301(b) and NPDES regulations at 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

NPDES regulations at 40 CFR 122.44(d)(1)(i) mandate that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential is established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA

criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided at 40 CFR 122.44(d)(1)(vi).

**H. Water Quality Control Plans.** The Regional Water Board has adopted the *Water Quality Control Plan, Central Coast Basin* (the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Region. To address ocean waters, the Basin Plan incorporates by reference the *Water Quality Control Plan for Ocean Waters of California* (the Ocean Plan).

Beneficial uses established by the Basin Plan and the Ocean Plan for ocean waters within the Central Coast Region are described in Tables 5, below.

**Table 2. Basin Plan and Ocean Plan Beneficial Uses**

Receiving Water	Beneficial Uses
Ocean Waters of the Central Coast Region	<ul style="list-style-type: none"> <li>• Industrial Process and Industrial Service Supply</li> <li>• Wildlife Habitat</li> <li>• Migration of Aquatic Organisms</li> <li>• Preservation of Biological Habitats of Special Significance</li> <li>• Rare, Threatened, or Endangered Species</li> <li>• Water Contact and Non-Contact Recreation, including Aesthetic Enjoyment</li> <li>• Navigation</li> <li>• Commercial and Sport Fishing</li> <li>• Mariculture</li> <li>• Preservation and Enhancement of Designated Areas of Special Biological Significance (ASBS)</li> <li>• Marine Habitat</li> <li>• Fish Spawning and Shellfish Harvesting</li> </ul>

Requirements of this Order implement the Basin Plan and Ocean Plan.

**I. California Ocean Plan.** The State Water Board adopted the Ocean Plan in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The latest amendment was adopted on April 21, 2005, and became effective on February 14, 2006. In order to protect beneficial uses of ocean waters, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan, which is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan is posted on the State Water Board website at <http://www.swrcb.ca.gov/plnspols/docs/oplans/oceanplan2005.pdf>.

**J. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes. [65 Fed. Reg. 24641 (April 27, 2000), codified at 40 CFR 131.21] Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to

USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

- K. Stringency of Requirements for Individual Pollutants.** As discussed in section IV. B of the Fact Sheet, the Order establishes technology-based effluent limitations for oil and grease, total suspended solids, settleable solids, turbidity, and pH, which implement requirements of the Ocean Plan. Where effluent limitations are necessary to meet applicable water quality standards, those limitations are not more stringent than required by the CWA.

WQBELs, if necessary, are scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. Procedures for calculating individual WQBELs, if necessary, are based on the Ocean Plan, which was approved by USEPA on February 14, 2006. All beneficial uses and water quality objectives contained in the Basin Plan and Ocean Plan were approved under State law and submitted to and approved by USEPA prior to May 30, 2000.

Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to 40 CFR 131.21(c)(1).

Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

- L. Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California’s antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board’s Basin Plan implements and incorporates by reference both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

- M. Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and NPDES regulations at 40 CFR 122.44 (l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. As discussed in the Fact Sheet, effluent limitations and other requirements established by this Order satisfy applicable anti-backsliding provisions of the CWA and NPDES regulations.

- N. Endangered Species.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A.

sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State. The Discharger is responsible for meeting all requirements of State and federal law regarding threatened and endangered species.

- O. Monitoring and Reporting.** NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. California Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (Attachment E) establishes monitoring and reporting requirements to implement federal and State requirements.
- P. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with NPDES regulations at 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Regional Water Board has also included in this Order special provisions applicable to authorized dischargers. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- Q. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.B, IV.C, and V.B. of this Order are included to implement State law only. These provisions/requirements are not required or authorized under the federal CWA; and consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- R. Notification of Interested Parties.** The Regional Water Board has notified dischargers authorized by Order No. R3-2002-0076 and interested agencies and persons of its intent to reissue the General Permit for Discharges from Aquaculture Facilities and Aquariums and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet accompanying this Order.
- S. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to discharges eligible for coverage under the General Permit. Details of the Public Hearing are provided in the Fact Sheet of this Order.
- T. Privilege to Discharge.** In accordance with Water Code section 13263(g), no discharge of waste into waters of the state, whether or not the discharge is subject to waste discharge requirements, creates a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights. Authorization to discharge under the General Permit and the privilege to discharge waste into waters of the State are conditional upon the discharge complying with applicable provisions of division 7 of the California Water Code and of the Clean Water Act (as amended or as supplemented by implementing guidelines and regulations) and with any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisances. This Order shall serve as an NPDES permit pursuant to section 402 of the Clean Water Act.



### **III. DISCHARGE PROHIBITIONS**

- A.** Discharge of any waste at a location or in a manner different from that described in a Discharger's completed notice of intent (NOI), and as described by this Order, is prohibited.
- B.** Discharges to ocean waters that cause or have the reasonable potential to cause or contribute to excursions above any numerical water quality objective contained in Table B of the Ocean Plan are prohibited.
- C.** Discharges containing substances in concentrations that are toxic to human, animal, plant, or aquatic life are prohibited.
- D.** Discharge of any radiological, chemical, or biological warfare agent or high level radioactive waste is prohibited.
- E.** Discharge of sludge by pipeline to the Ocean is prohibited. The discharge of municipal or industrial waste sludge directly to the Ocean or into a waste stream that discharges to the Ocean is prohibited. The discharge of sludge digester supernatant, without further treatment, directly to the Ocean or to a waste stream that discharges to the Ocean, is prohibited.
- F.** Discharge of any biota listed in Title 14, Section 245 of the California Code of Regulations, Aquaculture Disease Control Regulations, or referenced in Part a. 8 of the same section, which is not indigenous to the Central Coast Region, is prohibited. In accordance with Section 15500 et seq. of the California Fish and Game Code, enforcement of this prohibition must be requested by the California Department of Fish and Game.
- G.** Discharge of active malachite green fungicide is prohibited.
- H.** Discharge to receiving waters designated as an Area of Special Biological Significance is prohibited.

## IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

### A. Effluent Limitations

#### 1. Final Effluent Limitations

- a. Effluent shall not contain substances that:
  - i. Float or become floatable upon discharge,
  - ii. May form sediments that degrade aquatic life,
  - iii. Accumulate to toxic levels in surface waters, sediments, or biota.
  - iv. Significantly decrease the natural light available to aquatic life,
  - v. Result in aesthetically undesirable discoloration of the water surface.
- b. Effluent shall be settled, screened, or filtered to minimize or eliminate the discharge of waste solids to the greatest extent practicable.
- c. Effluent shall not contain constituents in excess of the following limitations.

**Table 3. Final Effluent Limitations<sup>1</sup>**

Pollutant	Units	Monthly Average	Weekly Average	Instantaneous Maximum
Oil & Grease	mg/L	25	40	75
Total Suspended Solids (TSS)	mg/L	---	---	60
Settleable Solids	mL/L/hr	1.0	1.5	3.0
Turbidity	NTUs	75	100	225
pH	s.u.	6.0 – 9.0 at all times		

1. Source water quality will be evaluated when determining compliance with effluent limitations.

#### 2. Interim Effluent Limitations

This section of the standardized permit is not applicable to the General Permit.

### B. Land Discharge Specifications

This section of the standardized permit is not applicable to the General Permit.

### C. Reclamation Specifications

This section of the standardized permit is not applicable to the General Permit.

## **V. RECEIVING WATER LIMITATIONS**

### **A. Surface Water Limitations**

The following receiving water limitations are based on water quality objectives contained in the Ocean Plan and are a required part of this Order. Compliance shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed.

1. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone designated for water contact recreation use by the Regional Water Board, the following bacteriological objectives shall be maintained throughout the water column.

30-Day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each receiving water monitoring location.

- a. Total coliform density shall not exceed 1,000 per 100 mL;
- b. Fecal coliform density shall not exceed 200 per 100 mL; and
- c. Enterococcus density shall not exceed 35 per 100 mL.

Single Sample maximum;

- a. Total coliform density shall not exceed 10,000 per 100 mL;
  - b. Fecal coliform density shall not exceed 400 per 100 mL; and
  - c. Enterococcus density shall not exceed 104 per 100 mL.
  - d. Total coliform density shall not exceed 1,000 per 100 mL when the fecal coliform to total coliform ratio exceeds 0.1
2. At all areas where shellfish may be harvested for human consumption, as determined by the Regional Water Board, the following bacteriological objectives shall be maintained throughout the water column:
    - a. The median total coliform concentration shall not exceed 70 MPN, and not more than 10 percent of samples shall exceed 230 MPN.
  3. Floating particulates and grease and oil shall not be visible.
  4. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.

5. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
6. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.
7. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally as a result of the discharge of oxygen demanding waste material.
8. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
9. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
10. The concentration of substances set forth in Chapter II, Table B of the Ocean Plan in marine sediments shall not be increased to levels that would degrade indigenous biota.
11. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life.
12. Nutrient levels shall not cause objectionable aquatic growths or degrade indigenous biota.
13. Discharges shall not cause exceedances of water quality objectives for ocean waters of the State established in Chapter II, Table B of the Ocean Plan.
14. Marine communities, including vertebrate, invertebrate and plant species, shall not be degraded.
15. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
16. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
17. Discharge of radioactive waste shall not degrade marine life.

## **B. Groundwater Limitations**

Activities at the facilities authorized to discharge under the General Permit shall not cause exceedance/deviation from the following water quality objectives for groundwater established by the Basin Plan.

1. Groundwater shall not contain taste or odor producing substances in concentrations that adversely affect beneficial uses.

2. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life; or result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

## VI. PROVISIONS

### A. Standard Provisions

1. Dischargers authorized to discharge under the General Permit shall comply with all Standard Provisions included in Attachment D of this Order.

#### 2. Application for Coverage by the General Permit.

Existing dischargers authorized by this General Permit General Permit at the time of expiration will automatically be re-enrolled under the revised General Permit. Existing dischargers authorized by an individual permit but seeking coverage under the General Permit, and new dischargers seeking coverage under the General Permit shall submit to the Executive Officer a completed Notice of Intent (NOI) form, which is included as Attachment B of this Order.

##### a. Deadline for Submission

###### *Existing Dischargers Authorized by this General Permit*

- i. This General Permit expires on **December 5, 2013**. Those enrollees who are covered under this General Permit at the time of expiration will automatically be re-enrolled under the revised General Permit, unless a notice of termination NOT is submitted to terminate coverage.

###### *Existing Dischargers Authorized by an Individual Permit*

- ii. In order to seek coverage under this General Permit, existing dischargers who are authorized to discharge under an individual permit, shall submit an NOI at least 180 days prior to the expiration date of the individual permit.

###### *New Dischargers*

- iii. New dischargers seeking authorization to discharge under this General Permit shall submit an NOI at least 180 days prior to the planned commencement of the discharge.

##### b. Regional Water Board Authorization

- i. Authorization to discharge under this General Permit requires written notification from the Executive Officer that coverage has been granted.
- ii. Pursuant to NPDES regulations at 40 CFR 122.28 (b) (2) (vi), the Executive Officer may require a discharger to comply with the conditions of this General Permit. Such a discharger shall therefore become obligated to meet all discharge limitations, and monitoring and reporting requirements of the

General Permit, even if the Discharger has not submitted an NOI to be covered by the General Permit.

- iii. Pursuant to NPDES regulations at 40 CFR 122.28 (b) (3), the Executive Officer may require any discharger authorized by the General Permit to apply for and obtain an individual permit. Coverage under the General Permit will terminate immediately upon the effective date of such an individual permit.
- iv. Public notification and/or Regional Water Board review of the Executive Officer's intent to authorize a discharge under this General Permit may delay authorization to discharge under this General Permit.
- v. A discharger authorized to discharge under the General Permit shall submit an updated NOI when there is a material change in the information submitted with its original NOI, or any change in activities at the facility which may affect the character (quality or quantity) of discharges from the facility.
- vi. Existing dischargers who fail to submit a complete NOI by the deadline established herein will be deemed as out of compliance with the General Permit and subject to all penalties allowable pursuant to applicable provisions of the Clean Water Act and the California Water Code including section 13261 thereof. New dischargers will not be authorized to discharge until a complete NOI has been submitted to the Regional Water Board and the Executive Officer has given notice of authorization in accordance with Section VI. A. 2. b of this Order.

d. NOI Content

All dischargers shall complete and submit to the Executive Officer the NOI form, included as Attachment B of this Order, as application for coverage or continued coverage to discharge to waters of the State under the General Permit.

**B. Monitoring and Reporting Program (MRP) Requirements**

The Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment E of this Order. All monitoring shall be conducted according to procedures established at 40 CFR Part 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*.

**C. Special Provisions**

**1. Reopener Provisions**

- a. This permit may be reopened and modified in accordance with NPDES regulations at 40 CFR 122 and 124, as necessary, to include additional conditions or limitations based on newly available information or to implement any USEPA approved, new, State water quality objective.

## **2. Special Studies, Technical Reports and Additional Monitoring Requirements**

### **a. Toxicity Reduction Requirements**

If whole effluent chronic toxicity consistently exceeds 1.0 chronic toxicity unit (TUc) with any test specie, following monitoring required by section V of the Monitoring and Reporting Program (Attachment E), the Discharger shall conduct a Toxicity Reduction Evaluation (TRE) in accordance with the Discharger's TRE Workplan.

A TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A toxicity identification evaluation (TIE) may be required as part of the TRE, if appropriate. A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases - characterization, identification, and confirmation using aquatic organism toxicity tests. The TRE shall include all reasonable steps to identify the source of toxicity. The Discharger shall take all reasonable steps to reduce toxicity to the required level once the source of toxicity is identified.

The Discharger shall maintain a Toxicity Reduction Evaluation (TRE) Workplan, which describes steps that the Discharger intends to follow in the event that a toxicity effluent limitation or monitoring "trigger" established by this Order is exceeded in the discharge. The workplan shall be prepared in accordance with current technical guidance and reference material, including EPA/600/2-88-070 (for industrial discharges) or EPA/600/2-88/062 (for municipal discharges), and shall include, at a minimum:

- a. Actions that will be taken to investigate/identify the causes/sources of toxicity,
- b. Actions that will be evaluated to mitigate the impact of the discharge, to correct the non-compliance, and/or to prevent the recurrence of acute or chronic toxicity (this list of action steps may be expanded, if a TRE is undertaken), and
- c. A schedule under which these actions will be implemented.

When initial monitoring measures whole effluent chronic toxicity in the effluent above 1.0 TUc, the Discharger shall resample immediately, if the discharge is continuing, and retest for whole effluent toxicity. Results of an initial failed test and results of subsequent monitoring shall be reported to the Executive Officer (EO) as soon as possible following receipt of monitoring results. The EO will determine whether to initiate enforcement action, whether to require the Discharger to implement a Toxicity Reduction Evaluation, or to implement other measures. The Discharger shall conduct a TRE giving due consideration to guidance provided by the USEPA's Toxicity Reduction Evaluation Procedures, Phases 1, 2, and 3 (EPA document nos.

EPA 600/3-88/034, 600/3-88/035, and 600/3-88/036, respectively). A TRE, if necessary, shall be conducted in accordance with the following schedule.

**Table 4. Toxicity Reduction Evaluation—Schedule**

Action Step	When Required
Take all reasonable measures necessary to immediately reduce toxicity, where the source is known.	Within 24 hours of identification of noncompliance.
Initiate the TRE in accordance to the Workplan.	Within 7 days of notification by the EO
Conduct the TRE following the procedures in the Workplan.	Within the period specified in the Workplan (not to exceed one year, without an approved Workplan)
Submit the results of the TRE, including summary of findings, required corrective action, and all results and data.	Within 60 days of completion of the TRE
Implement corrective actions to meet Permit limits and conditions.	To be determined by the EO

### 3. Best Management Practices and Pollution Prevention

- a. Dischargers authorized by the General Permit shall develop and maintain a Best Management Practices (BMP) Plan which describes how they will meet the goals and General Permit requirements established below.
- b. Existing dischargers and new dischargers seeking authorization under the General Permit shall submit a BMP Plan to the Executive Officer with their Notice of Intent / application for coverage under the General Permit. The BMP Plan shall be fully implemented no later than one month after commencement of the discharge or the effective date of enrollment under the General Permit.
- c. The BMP Plan shall ensure that the following objectives are met.
  - i. The number and quantity of pollutants discharged or potentially discharged from the facility shall be minimized to the extent feasible by appropriately managing each waste stream.
  - ii. Each facility system shall be examined for its potential to cause a release of pollutants and opportunities to minimize waste. The examination shall include all normal facility operations, including, but not limited to: structural maintenance, cleaning, feed management, transfer and importation of species, removal of mortalities, storage and handling of raw material, disposal of solid waste, employee training, and recordkeeping.
- d. The BMP Plan shall establish and document specific BMPs and operating procedures to attain the objectives specified above and shall follow the general guidance contained in the *Guidance Manual for Developing Best Management Practices* (USEPA, 1993) and the *Compliance Guide for the Concentrated Aquatic Animal Production Point Source Category* (USEPA, 2006). The BMP Plan shall include a statement of BMP policy and describe, at a minimum,



- feeding procedures, cleaning and maintenance procedures, schedules of activities, prohibited practices, treatment methods, and employee training.
- e. Dischargers shall amend their BMP Plans whenever there is a change in the facility or in its operation which increases the generation of pollutants or their discharge to receiving waters. Revision dates and summaries of revisions shall be documented in the BMP Plan.
  - f. Dischargers shall maintain a copy of their BMP Plan at the facility and shall make the Plan available to the Executive Officer or representatives thereof upon request.
  - g. Dischargers authorized by the General Permit shall include in the BMP Plan and implement the following best management practices (BMPs), if applicable.

#### *Solids Control*

- i. Permittees shall employ efficient feed management and feeding strategies that limit feed input to the minimum amount reasonably necessary to achieve production goals and sustain targeted rates of aquatic animal growth to minimize potential discharges of uneaten feed and waste products to waters of the U.S. In net pen and submerged cage systems, authorized dischargers shall collect, return to shore, and properly dispose of feed bags, packaging materials, waste rope and netting.
- ii. Permittees shall identify and implement procedures for routine cleaning of rearing units and off line settling basins, and procedures to minimize discharges of accumulated solids during inventorying, grading, and harvesting in production systems.
- iii. Permittees shall remove and dispose of mortalities on a regular basis and shall minimize any discharge associated with the transport or harvesting of aquatic animals including blood, viscera, carcasses, or transport water containing blood.

#### *Materials Storage*

- i. Permittees must ensure proper storage of drugs, pesticides, and feed to prevent spills that may result in discharges to waters of the U.S.
- ii. Permittees must implement procedures for properly containing, cleaning, and disposing of any spilled material.

#### *Structural Maintenance*

- i. Permittees must inspect production and wastewater treatment systems on a routine basis to identify and promptly repair damage.
- ii. Permittees must conduct regular maintenance of production and wastewater treatment systems to ensure their proper function.

### *Recordkeeping*

- i. Permittees must maintain records that document feed amounts and the numbers and weight of aquatic animals.
- ii. Permittees must keep records documenting the frequency of cleaning, inspections, maintenance, repairs, and (for net pen and submerged cage systems) net changes.
- iii. Permittees must keep records of any drugs, pesticides, or other chemicals administered at the facility.

### *Training*

- i. Permittees must train facility personnel in spill prevention and spill response.
- ii. Permittees must train staff regarding proper operation and cleaning of production and wastewater treatment systems, including feeding procedures and equipment use.

## **4. Construction, Operation and Maintenance Specifications**

This section of the standardized permit template is not applicable to the General Permit.

## **5. Special Provisions for Municipal Facilities (POTWs Only)**

This section of the standardized permit template is not applicable to the General Permit.

## **6. Other Special Provisions**

- a. **Discharges of Storm Water.** For the control of storm water discharged from the sites of facilities authorized to discharge by the General Permit, if applicable, Dischargers shall seek authorization to discharge storm water under and meet the requirements of the State Water Resources Control Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*.
- b. **Notice Requirements.**

### *Drugs*

If applicable, authorized dischargers shall notify the Executive Officer and Monterey Bay National Marine Estuary staff, for those facilities discharging into the Monterey Bay National Marine Estuary, of the use of any investigational new animal drug (INAD) or any extralabel drug use where such a use may lead to a discharge of the drug to waters of the U.S. Reporting is not required for an INAD or extralabel drug use that has been previously approved by FDA for a different

species or disease if the INAD or extralabel use is at or below the approved dosage and involves similar conditions of use.

A written report is required within seven days of agreeing to participate in an INAD study. The report must identify the INAD, method of use, dosage, and the disease or condition the INAD is intended to treat.

An oral report is required no later than seven days after initiating use of an INAD or extralabel drug (report must identify the drug used, method of application, and reason for using that drug), and a written report is required within 30 days of initiating use of that INAD or extralabel drug (report must identify the drug used; reason for treatment; dates, times, and duration of treatment; method of application; and the amount added).

#### *Reportable Failures*

Authorized dischargers shall notify the Executive Officer and, for facilities discharging into the Monterey Bay National Marine Estuary, shall notify Monterey Bay National Marine Estuary staff regarding failures in, or damage to, the structure of an aquatic animal containment system resulting in an unanticipated material discharge of pollutants.

Authorized dischargers shall provide an oral report within 24 hours of discovery of any reportable failure or damage that results in a material discharge of pollutants, describing the cause and identifying the materials released.

Authorized dischargers shall provide a written report within seven days of discovery of failure or damage, documenting the cause, the duration of the failure or damage, a description of the material released, and steps being taken to prevent a recurrence.

#### *Spilled Material*

Authorized dischargers shall notify the Executive Officer regarding spills of drugs, pesticides, or feed that result in a discharge to waters of the State and/or United States. In the event of such a spill, dischargers shall provide an oral report within 24 hours of its occurrence and a written report within seven days. The reports shall include the identity and quantity of material spilled.

### **7. Compliance Schedules**

This section of the standardized permit template is not applicable.

### **8. Solid Waste Disposal**

Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed in a manner consistent with Title 27 of the California Code of Regulations (CCR) and approved by the Executive Officer.

## **VII. COMPLIANCE DETERMINATION**

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

### **A. General.**

Compliance with effluent limitations for reportable pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the reportable pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).

### **B. Multiple Sample Data.**

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND), the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

## ATTACHMENT A – DEFINITIONS

### Acute Toxicity:

#### a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

$$\text{TUa} = \frac{100}{\frac{96\text{-hr LC}}{50\%}}$$

#### b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Ocean Plan Appendix III. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$\text{TUa} = \frac{\log (100 - S)}{1.7}$$

where: S = percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

**Areas of Special Biological Significance (ASBS):** are those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of State Water Quality Protection Areas.

**Average Monthly Effluent Limitation (AMEL):** the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**Average Weekly Effluent Limitation (AWEL):** the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

**Chlordane** shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

**Chronic Toxicity:** This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

$$\text{TUc} = \frac{100}{\text{NOEL}}$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix II.

**Daily Discharge:** Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

**DDT** shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

**Degrade:** Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

**Detected, but Not Quantified (DNQ)** are those sample results less than the reported Minimum Level, but greater than or equal to the laboratory's method detection level (MDL).

**Dichlorobenzenes** shall mean the sum of 1,2- and 1,3-dichlorobenzene.

**Downstream Ocean Waters** shall mean waters downstream with respect to ocean currents.

**Dredged Material:** Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil".

**Enclosed Bays** are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

**Endosulfan** shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.

**Estuaries and Coastal Lagoons** are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

**Halomethanes** shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

**HCH** shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

**Initial Dilution** is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and non-buoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Board, whichever results in the lower estimate for initial dilution.

**Instantaneous Maximum Effluent Limitation:** the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

**Instantaneous Minimum Effluent Limitation:** the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

**Kelp Beds**, for purposes of the bacteriological standards of the Ocean Plan, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

**Mariculture** is the culture of plants and animals in marine waters independent of any pollution source.

**Material:** (a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of the Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

**Maximum Daily Effluent Limitation (MDEL):** the highest allowable daily discharge of a pollutant.

**MDL (Method Detection Limit)** is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, PART 136, Appendix B.

**Minimum Level (ML)** is the concentrations at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes and processing steps have been followed.

**Natural Light:** Reduction of natural light may be determined by the Regional Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Water Board.

**Not Detected (ND)** are those sample results less than the laboratory's MDL.

**Ocean Waters** are the territorial marine waters of the state as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the state could affect the quality of the waters of the state, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

**PAHs (polynuclear aromatic hydrocarbons)** shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

**PCBs (polychlorinated biphenyls)** shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.



**Reported Minimum Level** is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix II of the Ocean Plan in accordance with section III.C.5.a. of the Ocean Plan or established in accordance with section III.C.5.b. of the Ocean Plan. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the reported ML.

**Satellite Collection System** is the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

**Shellfish** are organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e., mussels, clams and oysters).

**Significant Difference** is defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

**Six-month Median Effluent Limitation:** the highest allowable moving median of all daily discharges for any 180-day period.

**State Water Quality Protection Areas (SWQPAs)** are non-terrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All Areas of Special Biological Significance (ASBS) that were previously designated by the State Water Board in Resolution No.s 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by the Ocean Plan.

**TCDD Equivalents** shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5

2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

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**Toxicity Reduction Evaluation (TRE)** is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity.

The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

**Waste:** As used in the Ocean Plan, waste includes a Discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

**Water Reclamation:** The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

## **ATTACHMENT B – NOTICE OF INTENT FORM**

## NOTICE OF INTENT

**TO COMPLY WITH ORDER NO. R3-2008-0059  
GENERAL NPDES PERMIT NO. CAG993003**

### FOR DISCHARGERS FROM AQUACULTURE FACILITIES AND AQUARIUMS

#### I. FACILITY INFORMATION

##### A. Facility

Name:			
Previous Name and Date of Change, If Applicable:			
Physical Address:			
City:	County:	State:	Zip Code:
Contact Person, Title:			
Telephone Number:		Fax Number:	
E-mail Address:			
<input type="checkbox"/> New Discharger or Facility			
<input type="checkbox"/> Existing Discharger Covered by the General Permit in a Previous Order			
<input type="checkbox"/> Existing Discharger Previously Covered by an Individual Permit			
<input type="checkbox"/> Other (explain):			
NPDES Permit Numbers Currently or Previously Assigned to the Facility:			

##### B. Facility Owner

Name:		
Mailing Address:		
City:	State:	Zip Code:
Owner Type: <input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input type="checkbox"/> Government Agency <input type="checkbox"/> Partnership <input type="checkbox"/> Other (describe)		Federal Tax ID:
Contact Person, Title:		
Telephone Number:		Fax Number:
Email Address:		

##### C. Facility Operator (If different from Owner)

Name:		
Mailing Address:		
City:	State:	Zip Code:
Contact Person, Title:		
Telephone Number:	Fax Number:	
Email Address:		

#### **D. Receiving Water / Discharge Points**

Discharge Point	Receiving Water	Latitude	Longitude
001			
002			
003			
004			

#### **E. Location Map**

Attach a Location Map identifying the location of the facility, discharge points, and monitoring locations. The map should be based upon an official U.S. Geological Survey map, with an appropriate scale shown, and include the latitude and longitude of the facility and identifiable location descriptors, such as cross streets and landmarks.

### **II. OPERATIONS AND PRODUCTION DESCRIPTION**

Applicants for coverage under the General Permit shall submit, with the NOI, a Best Management Practices Plan, which satisfies the requirements of section VI. C. 3 of the General Permit. Applicants shall also submit a description of the facility that includes the following.

- A. A general description of the facility, indicating the total number of ponds, raceways, holding tanks, and similar water containing or conveyance structures.
- B. A flow diagram of the facility that describes major system components; all sub-flows, inputs to and outputs from the facility; sources of wastewater and wastewater treatment systems.
- C. The projected number of operating days for the facility on a monthly basis throughout a calendar year.
- D. A list of species of aquatic animals and plants held and fed, or introduced to the facility. For each species, give the total weight produced by the facility per year in pounds of

harvestable weight, and the maximum weight present at any one time. The values given should be representative of normal operation.

- E. The total pounds of food fed during the calendar month of maximum feeding, based upon normal operation.
- F. A list of the drugs, disinfectants, and other chemicals that are or will be used at the facility, including their purpose, active ingredient(s); rates, location, and method (flush or static) of application; and concentrations present in the discharge. Dischargers shall submit Material Safety Data Sheets for each drug, disinfectant, or chemical used; calculations of concentrations present in the discharge, and descriptions of analytical methods, including method detection limits, that are available for each material.

### III. DISCHARGE CHARACTERIZATION

Attach a description of the discharge for each Discharge Point. The description shall include: the origin of the water (seawater, fresh water wells, municipal supply, etc), the origin of the discharge (facility systems), daily average and maximum rates of discharge, seasonal or other discharge cycles, and whether the discharge is continuous or intermittent. Include representative water quality data that are descriptive of the discharge, if such data are available, and include the minimum probable initial dilution, expressed as parts seawater per part wastewater, if available. The minimum probable initial dilution shall be calculated in accordance with a model approved by the State Water Board and shall be accompanied by a figure which delineates the zone of initial dilution.

### IV. NEW DISCHARGERS

Facilities that are subject to Effluent Limitations Guidelines for the Concentrated Aquatic Animal Production Point Source Category at 40 CFR Part 451 and built after the effective date of these regulations (September 22, 2004) are defined as new sources.

### V. LIST OF INTERESTED PARTIES

Attach a complete list of the names and addresses of all property owners within a 300 foot radius of the facility or the point(s) of discharge, and include any other parties known to have an interest in the discharge.

### VI. CERTIFICATION

**I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice of Intent and all attachments, and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the Notice of Intent, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.**

Name and Title (type or print)	Signature	Date

## **VII.SUBMITTAL**

A. Submit this Notice of Intent to:

Regional Water Board  
Central Coast Region  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401

For discharges originating in Monterey County, Santa Cruz County, and those portions of San Luis Obispo County which drain into the Pacific Ocean northerly of the southern boundary of the Monterey Bay National Marine Sanctuary, the discharger shall also submit a copy of the Notice of Intent to:

Monterey Bay National Marine Sanctuary  
299 Foam Street  
Monterey, CA 93940

B. The Executive Officer may request any additional information from applicants for coverage under the General Permit, beyond the information provided in the Notice of Intent, to determine whether the discharge meets criteria for authorization to discharge under the General Permit.

## **ATTACHMENT C**

This attachment is intentionally left blank and would include a site-specific facility flow schematic in accordance with this standardized permit format if this wasn't a general permit.



## **ATTACHMENT D –STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

#### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

#### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

#### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

## **F. Inspection and Entry**

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

## **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));

- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)
5. Notice
- a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

## H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)
- 2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

- b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

## **II. STANDARD PROVISIONS – PERMIT ACTION**

### **A. General**

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

### **C. Transfers**

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

### **III. STANDARD PROVISIONS – MONITORING**

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- B.** Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

### **IV. STANDARD PROVISIONS – RECORDS**

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

**B. Records of monitoring information shall include:**

- 1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
- 2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
- 3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
- 4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
- 5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
- 6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

**C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):**

- 1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
- 2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

## **V. STANDARD PROVISIONS – REPORTING**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

### **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. § 122.22(a)(3).)
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
  - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board

and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. § 122.22(d).)

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

### **D. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

### **E. Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates

and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
  - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

#### **F. Planned Changes**

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R. § 122.41(l)(1)(iii).)

#### **G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. § 122.41(l)(2).)

#### **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)



## **I. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

## **VI. STANDARD PROVISIONS – ENFORCEMENT**

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

## **VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS**

### **A. Publicly-Owned Treatment Works (POTWs)**

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 C.F.R. § 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 C.F.R. § 122.42(b)(2).)
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

## **ATTACHMENT D-1 - CENTRAL COAST WATER BOARD STANDARD PROVISIONS (JANUARY 1985)**

### **I. Central Coast General Permit Conditions**

#### **A. Central Coast Standard Provisions – Prohibitions**

1. Introduction of "incompatible wastes" to the treatment system is prohibited.
2. Discharge of high-level radiological waste and of radiological, chemical, and biological warfare agents is prohibited.
3. Discharge of "toxic pollutants" in violation of effluent standards and prohibitions established under Section 307(a) of the Clean Water Act is prohibited.
4. Discharge of sludge, sludge digester or thickener supernatant, and sludge drying bed leachate to drainageways, surface waters, or the ocean is prohibited.
5. Introduction of pollutants into the collection, treatment, or disposal system by an "indirect discharger" that:
  - a. Inhibit or disrupt the treatment process, system operation, or the eventual use or disposal of sludge; or,
  - b. Flow through the system to the receiving water untreated; and,
  - c. Cause or "significantly contribute" to a violation of any requirement of this Order, is prohibited.
6. Introduction of "pollutant free" wastewater to the collection, treatment, and disposal system in amounts that threaten compliance with this order is prohibited.

#### **B. Central Coast Standard Provisions – Provisions**

1. Collection, treatment, and discharge of waste shall not create a nuisance or pollution, as defined by Section 13050 of the California Water Code.
2. All facilities used for transport or treatment of wastes shall be adequately protected from inundation and washout as the result of a 100-year frequency flood.
3. Operation of collection, treatment, and disposal systems shall be in a manner that precludes public contact with wastewater.
4. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed in a manner approved by the Executive Officer.
5. Publicly owned wastewater treatment plants shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Title 23 of the California Administrative Code.

6. After notice and opportunity for a hearing, this order may be terminated for cause, including, but not limited to:
  - a. violation of any term or condition contained in this order;
  - b. obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts;
  - c. a change in any condition or endangerment to human health or environment that requires a temporary or permanent reduction or elimination of the authorized discharge; and,
  - d. a substantial change in character, location, or volume of the discharge.
7. Provisions of this permit are severable. If any provision of the permit is found invalid, the remainder of the permit shall not be affected.
8. After notice and opportunity for hearing, this order may be modified or revoked and reissued for cause, including:
  - a. Promulgation of a new or revised effluent standard or limitation;
  - b. A material change in character, location, or volume of the discharge;
  - c. Access to new information that affects the terms of the permit, including applicable schedules;
  - d. Correction of technical mistakes or mistaken interpretations of law; and,
  - e. Other causes set forth under Sub-part D of 40 CFR Part 122.
9. Safeguards shall be provided to assure maximal compliance with all terms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the affect of accidental discharges shall:
  - a. identify possible situations that could cause "upset", "overflow" or "bypass", or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.)
  - b. evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the permit.
10. Physical Facilities shall be designed and constructed according to accepted engineering practice and shall be capable of full compliance with this order when properly operated and maintained. Proper operation and maintenance shall be

described in an Operation and Maintenance Manual. Facilities shall be accessible during the wet-weather season.

11. Production and use of reclaimed water is subject to the approval of the Board. Production and use of reclaimed water shall be in conformance with reclamation criteria established in Chapter 3, Title 22, of the California Administrative Code and Chapter 7, Division 7, of the California Water Code. An engineering report pursuant to section 60323, Title 22, of the California Administrative Code is required and a waiver or water reclamation requirements from the Board is required before reclaimed water is supplied for any use, or to any user, not specifically identified and approved either in this Order or another order issued by this Board.

### **C. Central Coast Standard Provisions – General Monitoring Requirements**

1. If results of monitoring a pollutant appear to violate effluent limitations based on a weekly, monthly, 30-day, or six-month period, but compliance or non-compliance cannot be validated because sampling is too infrequent, the frequency of sampling shall be increased to validate the test within the next monitoring period. The increased frequency shall be maintained until the Executive Officer agrees the original monitoring frequency may be resumed.

For example, if copper is monitored annually and results exceed the six-month median numerical effluent limitation in the permit, monitoring of copper must be increased to a frequency of at least once every two months (Central Coast Standard Provisions – Definitions I.G.13.). If suspended solids are monitored weekly and results exceed the weekly average numerical limit in the permit, monitoring of suspended solids must be increased to at least four (4) samples every week (Central Coast Standard Provisions – Definitions I.G.14.).

2. Water quality analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Health Services for the constituent(s) being analyzed. Bioassay(s) performed in order to monitor compliance with this permit shall be in accord with guidelines approved by the State Water Resources Control Board and the State Department of Fish and Game. If the laboratory used or proposed for use by the discharger is not certified by the California Department of Health Services or, where appropriate, the Department of Fish and Game due to restrictions in the State's laboratory certification program, the discharger shall be considered in compliance with this provision provided:
  - a. Data results remain consistent with results of samples analyzed by the Central Coast Water Board;
  - b. A quality assurance program is used at the laboratory, including a manual containing steps followed in this program that is available for inspections by the staff of the Central Coast Water Board; and,
  - c. Certification is pursued in good faith and obtained as soon as possible after the program is reinstated.

3. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Samples shall be taken during periods of peak loading conditions. Influent samples shall be samples collected from the combined flows of all incoming wastes, excluding recycled wastes. Effluent samples shall be samples collected downstream of the last treatment unit and tributary flow and upstream of any mixing with receiving waters.
4. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

#### **D. Central Coast Standard Provisions – General Reporting Requirements**

1. Reports of marine monitoring surveys conducted to meet receiving water monitoring requirements of the Monitoring and Reporting Program shall include at least the following information:
  - a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, etc.).
  - b. A description of sampling stations, including differences unique to each station (e.g., station location, grain size, rocks, shell litter, calcareous worm tubes, evident life, etc.).
  - c. A description of the sampling procedures and preservation sequence used in the survey.
  - d. A description of the exact method used for laboratory analysis. In general, analysis shall be conducted according to Central Coast Standard Provisions – C.1 above, and Federal Standard Provision – Monitoring III.B. However, variations in procedure are acceptable to accommodate the special requirements of sediment analysis. All such variations must be reported with the test results.
  - e. A brief discussion of the results of the survey. The discussion shall compare data from the control station with data from the outfall stations. All tabulations and computations shall be explained.
2. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted within 14 days following each scheduled date unless otherwise specified within the permit. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of full compliance.
3. The “Discharger” shall file a report of waste discharge or secure a waiver from the Executive Officer at least 180 days before making any material change or proposed change in the character, location, or plume of the discharge.

4. Within 120 days after the discharger discovers, or is notified by the Central Coast Water Board, that monthly average daily flow will or may reach design capacity of waste treatment and/or disposal facilities within four (4) years, the discharger shall file a written report with the Central Coast Water Board. The report shall include:
  - a. the best estimate of when the monthly average daily dry weather flow rate will equal or exceed design capacity; and,
  - b. a schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

In addition to complying with Federal Standard Provision – Reporting V.B., the required technical report shall be prepared with public participation and reviewed, approved and jointly submitted by all planning and building departments having jurisdiction in the area served by the waste collection, treatment, or disposal facilities.

5. All “Dischargers” shall submit reports to the:

California Regional Water Quality Control Board  
Central Coast Region  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401-7906

For discharges originating in Monterey County, Santa Cruz County, and those portions of San Luis Obispo County which drain into the Pacific Ocean northerly of the southern boundary of the Monterey Bay National Marine Sanctuary, the discharger shall also submit a copy of reports to:

Monterey Bay National Marine Sanctuary  
299 Foam Street  
Monterey, CA 93940

In addition, “Dischargers” with designated major discharges shall submit a copy of each document to:

Regional Administrator  
US Environmental Protection Agency, Region 9  
Attention: CWA Standards and Permits Office (WTR-5)  
75 Hawthorne Street  
San Francisco, California 94105

6. Transfer of control or ownership of a waste discharge facility must be preceded by a notice to the Central Coast Water Board at least 30 days in advance of the proposed transfer date. The notice must include a written agreement between the existing “Discharger” and proposed “Discharger” containing specific date for transfer of responsibility, coverage, and liability between them. Whether a permit may be transferred without modification or revocation and reissuance is at the discretion of the Board. If permit modification or revocation and reissuance is necessary, transfer

may be delayed 180 days after the Central Coast Water Board's receipt of a complete permit application. Please also see Federal Standard Provision – Permit Action II.C.

7. Except for data determined to be confidential under Section 308 of the Clean Water Act (excludes effluent data and permit applications), all reports prepared in accordance with this permit shall be available for public inspection at the office of the Central Coast Water Board or Regional Administrator of EPA. Please also see Federal Standard Provision – Records IV.C.
8. By January 30th of each year, the discharger shall submit an annual report to the Central Coast Water Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. The discharger shall discuss the compliance record and corrective actions taken, or which may be needed, to bring the discharge into full compliance. The report shall address operator certification and provide a list of current operating personnel and their grade of certification. The report shall inform the Board of the date of the Facility's Operation and Maintenance Manual (including contingency plans as described Central Coast Standard Provision – Provision B.9., above), of the date the manual was last reviewed, and whether the manual is complete and valid for the current facility. The report shall restate, for the record, the laboratories used by the discharger to monitor compliance with effluent limits and provide a summary of performance relative to Section C above, General Monitoring Requirements.

If the facility treats industrial or domestic wastewater and there is no provision for periodic sludge monitoring in the Monitoring and Reporting Program, the report shall include a summary of sludge quantities, analyses of its chemical and moisture content, and its ultimate destination.

If applicable, the report shall also evaluate the effectiveness of the local source control or pretreatment program using the State Water Resources Control Board's "Guidelines for Determining the Effectiveness of Local Pretreatment Programs."

#### **E. Central Coast Standard Provisions – General Pretreatment Provisions**

1. Discharge of pollutants by "indirect dischargers" in specific industrial sub-categories (appendix C, 40 CFR Part 403), where categorical pretreatment standards have been established, or are to be established, (according to 40 CFR Chapter 1, Subchapter N), shall comply with the appropriate pretreatment standards:
  - a. By the date specified therein;
  - b. Within three (3) years of the effective date specified therein, but in no case later than July 1, 1984; or,
  - c. If a new indirect discharger, upon commencement of discharge.

#### **F. Central Coast Standard Provisions – Enforcement**

1. Any person failing to file a report of waste discharge or other report as required by this permit shall be subject to a civil penalty not to exceed \$5,000 per day.
2. Upon reduction, loss, or failure of the treatment facility, the "Discharger" shall, to the extent necessary to maintain compliance with this permit, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided.

## **G. Central Coast Standard Provisions – Definitions**

### **(Not otherwise included in Attachment A to this Order)**

1. A "composite sample" is a combination of no fewer than eight (8) individual samples obtained at equal time intervals (usually hourly) over the specified sampling (composite) period. The volume of each individual sample is proportional to the flow rate at the time of sampling. The period shall be specified in the Monitoring and Reporting Program ordered by the Executive Officer.
2. "Daily Maximum" limit means the maximum acceptable concentration or mass emission rate of a pollutant measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling. It is normally compared with results based on "composite samples" except for ammonia, total chlorine, phenolic compounds, and toxicity concentration. For all exceptions, comparisons will be made with results from a "grab sample".
3. "Discharger", as used herein, means, as appropriate: (1) the Discharger, (2) the local sewerage entity (when the collection system is not owned and operated by the Discharger), or (3) "indirect discharger" (where "Discharger" appears in the same paragraph as "indirect discharger", it refers to the discharger.)
4. "Duly Authorized Representative" is one where:
  - a. the authorization is made in writing by a person described in the signatory paragraph of Federal Standard Provision V.B.;
  - b. the authorization specifies either an individual or the occupant of a position having either responsibility for the overall operation of the regulated facility, such as the plant manager, or overall responsibility for environmental matters of the company; and,
  - c. the written authorization was submitted to the Central Coast Water Board.
5. A "grab sample" is defined as any individual sample collected in less than 15 minutes. "Grab samples" shall be collected during peak loading conditions, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with the daily maximum limits identified in Central Coast Standard Provision – Provision G.2. and instantaneous maximum limits.
6. "Hazardous substance" means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.



7. "Incompatible wastes" are:

- a. Wastes which create a fire or explosion hazard in the treatment works;
- b. Wastes which will cause corrosive structural damage to treatment works, but in no case wastes with a pH lower than 5.0 unless the works is specifically designed to accommodate such wastes;
- c. Solid or viscous wastes in amounts which cause obstruction to flow in sewers, or which cause other interference with proper operation of treatment works;
- d. Any waste, including oxygen demanding pollutants (BOD, etc), released in such volume or strength as to cause inhibition or disruption in the treatment works and subsequent treatment process upset and loss of treatment efficiency; and,
- e. Heat in amounts that inhibit or disrupt biological activity in the treatment works or that raise influent temperatures above 40 °C (104 °F) unless the treatment works is designed to accommodate such heat.

8. "Indirect Discharger" means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.

9. "Log Mean" is the geometric mean. Used for determining compliance of fecal or total coliform populations, it is calculated with the following equation:

$$\text{Log Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n},$$

in which "n" is the number of days samples were analyzed during the period and any "C" is the concentration of bacteria (MPN/100 ml) found on each day of sampling. "n" should be five or more.

10. "Mass emission rate" is a daily rate defined by the following equations:

$$\text{mass emission rate (lbs/day)} = 8.34 \times Q \times C; \text{ and,}$$

$$\text{mass emission rate (kg/day)} = 3.79 \times Q \times C,$$

where "C" (in mg/l) is the measured daily constituent concentration or the average of measured daily constituent concentrations and "Q" (in MGD) is the measured daily flow rate or the average of measured daily flow rates over the period of interest.

11. The "Maximum Allowable Mass Emission Rate," whether for a month, week, day, or six-month period, is a daily rate determined with the formulas in paragraph G.10, above, using the effluent concentration limit specified in the permit for the period and the average of measured daily flows (up to the allowable flow) over the period.

12. "Maximum Allowable Six-Month Median Mass Emission Rate" is a daily rate determined with the formulas in Central Coast Standard Provision – Provision G.10, above, using the "six-month Median" effluent limit specified in the permit, and the average of measured daily flows (up to the allowable flow) over a 180-day period.

13. "Median" is the value below which half the samples (ranked progressively by increasing value) fall. It may be considered the middle value, or the average of two middle values.
14. "Monthly Average" (or "Weekly Average", as the case may be) is the arithmetic mean of daily concentrations or of daily mass emission rates over the specified 30-day (or 7-day) period.

$$\text{Average} = (X1 + X2 + \dots + Xn) / n$$

in which "n" is the number of days samples were analyzed during the period and "X" is either the constituent concentration (mg/l) or mass emission rate (kg/day or lbs/day) for each sampled day. "n" should be four or greater.

15. "Municipality" means a city, town, borough, county, district, association, or other public body created by or under state law and having jurisdiction over disposal of sewage, industrial waste, or other waste.
16. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.
17. "Pollutant-free wastewater" means inflow and infiltration, storm waters, and cooling waters and condensates which are essentially free of pollutants.
18. "Primary Industry Category" means any industry category listed in 40 CFR Part 122, Appendix A.
19. "Removal Efficiency" is the ratio of pollutants removed by the treatment unit to pollutants entering the treatment unit. Removal efficiencies of a treatment plant shall be determined using "Monthly averages" of pollutant concentrations (C, in mg/l) of influent and effluent samples collected about the same time and the following equation (or its equivalent):

$$C_{\text{Effluent}} \text{ Removal Efficiency (\%)} = 100 \times (1 - C_{\text{effluent}} / C_{\text{influent}})$$

20. "Severe property damage" means substantial physical damage to property, damage to treatment facilities which causes them to become inoperable, or substantial and permanent loss to natural resources which can reasonably be expected to occur in the absence of a "bypass". It does not mean economic loss caused by delays in production.
21. "Sludge" means the solids, residues, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system.
22. To "significantly contribute" to a permit violation means an "indirect discharger" must:
- Discharge a daily pollutant loading in excess of that allowed by contract with the "Discharger" or by Federal, State, or Local law;

- b. Discharge wastewater which substantially differs in nature or constituents from its average discharge;
  - c. Discharge pollutants, either alone or in conjunction with discharges from other sources, which results in a permit violation or prevents sewage sludge use or disposal; or
  - d. Discharge pollutants, either alone or in conjunction with pollutants from other sources that increase the magnitude or duration of permit violations.
23. "Toxic Pollutant" means any pollutant listed as toxic under Section 307 (a) (1) of the Clean Water Act or under 40 CFR Part 122, Appendix D. Violation of maximum daily discharge limitations are subject to 24-hour reporting (Federal Standard Provisions V.E.).
24. "Zone of Initial Dilution" means the region surrounding or adjacent to the end of an outfall pipe or diffuser ports whose boundaries are defined through calculation of a plume model verified by the State Water Resources Control Board.

## ATTACHMENT E – MONITORING AND REPORTING PROGRAM

### Table of Contents

Attachment E – Monitoring and Reporting Program (MRP) .....	E-2
I. General Monitoring Provisions .....	E-2
II. Monitoring Locations .....	E-3
III. Influent Monitoring Requirements – Monitoring Locations INF-001, INF-002, etc. ....	E-3
IV. Effluent Monitoring Requirements – Monitoring Locations EFF-001, EFF-002, etc.....	E-4
V. Whole Effluent chronic Toxicity Testing Requirements.....	E-5
VI. Land Discharge Monitoring Requirements .....	E-7
VII. Reclamation Monitoring Requirements.....	E-7
VIII. Receiving Water Monitoring Requirements – Monitoring Locations RSW-001 and RSW-002.....	E-7
IX. Other Monitoring Requirements .....	E-8
A. Exotic Species Monitoring.....	E-8
B. Chemical Usage .....	E-8
X. Reporting Requirements.....	E-9
A. General Monitoring and Reporting Requirements.....	E-9
B. Self Monitoring Reports (SMRs) .....	E-9
C. Discharge Monitoring Reports (DMRs) .....	E-11
C. Other Reports .....	E-11

### List of Tables

Table E-1. Monitoring Station Locations .....	E-3
Table E-2. Influent Monitoring.....	E-4
Table E-3. Effluent Monitoring Requirements .....	E-4
Table E-4. Approved Tests — Chronic Toxicity .....	E-6
Table E-5. Monitoring Periods and Reporting Schedule.....	E-9

## **ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)**

NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

### **I. GENERAL MONITORING PROVISIONS**

- A.** Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health, in accordance with Water Code section 13176, and must include quality assurance/quality control data with their reports.
- B.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and approval of the Regional Water Board.
- C.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than  $\pm 10$  percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration, and operation of acceptable flow measurement devices can be obtained from the following references.
  - 1. A Guide to Methods and Standards for the Measurement of Water Flow, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 96 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)
  - 2. Water Measurement Manual, U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D.C. 20402. Order by Catalog No. 172.19/2:W29/2, Stock No. S/N 24003-0027.)
  - 3. Flow Measurement in Open Channels and Closed Conduits, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST.)
  - 4. NPDES Compliance Sampling Manual, U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225.)

- D. All monitoring instruments and devices used by authorized dischargers to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
- E. Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- F. Unless otherwise specified by this MRP, all monitoring shall be conducted according to test procedures established at 40 CFR 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*. All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations. Analyses for toxics listed in Table B of the California Ocean Plan (2005) shall adhere to guidance and requirements contained in that document.

## II. MONITORING LOCATIONS

Dischargers authorized to discharge by the General Permit shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order.

**Table E-1. Monitoring Station Locations**

Monitoring Location Name	Monitoring Location Description
INF-001	Source water, prior to any physical or chemical adjustment, treatment, or other alteration, and prior to contact with aquatic organisms.
INF-002	Source water monitoring stations shall be established for each significant water source (e.g., seawater, fresh water, municipal supply) and shall be named INF-001, INF-002, INF-003, etc..
EFF-001	Location where a representative sample of the discharge can be obtained following all wastewater treatment steps and before contact with the receiving water.
EFF-002	Effluent monitoring stations shall be established for each discrete point of discharge and shall be named EFF-001, EFF-002, EFF-003, etc.
RSW-001	100 feet upcoast from the point of discharge.
RSW-002	100 feet downcoast from the point of discharge.

## III. INFLUENT MONITORING REQUIREMENTS – MONITORING LOCATIONS INF-001, INF-002, ETC.

Dischargers shall monitor source water to the facility at Monitoring Locations INF-001, INF-002, etc. in accordance with the following schedule.

**Table E-2. Influent Monitoring**

Parameter	Units	Sample Type	Minimum Frequency	Sampling
Total Suspended Solids (TSS)	mg/L	Grab	Concurrently with effluent samples monitored for the same parameters	
pH	s.u.	Grab		
Turbidity	NTUs	Grab		
Temperature	° F	Grab		

#### IV. EFFLUENT MONITORING REQUIREMENTS – MONITORING LOCATIONS EFF-001, EFF-002, ETC

Dischargers shall monitor effluent at each point of discharge (Monitoring Locations EFF-001, EFF-002, etc.) in accordance with the following schedule.

**Table E-3. Effluent Monitoring Requirements**

Parameter	Units	Sample Type	Minimum Frequency	Sampling
Total Flow	MGD	Metered or Estimated	Weekly	
Settleable Solids	mL/L/hr	Grab	Quarterly	
TSS	mg/L	Grab	Quarterly	
Turbidity	NTUs	Grab	Quarterly	
pH	pH units	Grab	Quarterly	
Temperature	° F	Grab	Quarterly	
Oil and Grease	mg/L	Grab	Quarterly	
Chronic Toxicity	TUc	Grab	As determined by the Executive Officer <sup>[1]</sup>	
Ocean Plan Table B Pollutants <sup>[2]</sup>	µg/L	24-hr composite	As determined by the Executive Officer <sup>[3]</sup>	

<sup>[1]</sup> Whole effluent chronic toxicity monitoring shall be conducted according to the requirements established in section V. of this Monitoring and Reporting Program.

<sup>[2]</sup> Those pollutants identified in Table B of the Ocean Plan (2005). Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the Ocean Plan, including the Standard Monitoring Procedures presented in Appendix III of the Ocean Plan. The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix II of the Ocean Plan are the lowest calibration standards. The Discharger and its analytical laboratory shall select MLs, which are below applicable water quality criteria of Table B; and when applicable water quality criteria are below all MLs, the Discharger and its analytical laboratory shall select the lowest ML.

<sup>[3]</sup> In lieu of monitoring for the Table B pollutants, authorized dischargers may submit written certification with each monitoring report that substances listed in Table B of the Ocean Plan are not introduced or added to their waste stream(s) and that no change has occurred in activities at their aquaculture facility or aquarium that could cause such substances to be present in their waste streams. Despite the allowance of a “certification” in lieu of monitoring, the Executive Officer may, at his discretion, require actual monitoring for all or part of the Table B pollutants when he has reason to believe that a Table B pollutant may be present in a discharge at levels exceeding applicable water quality objectives established by Table B. The frequency of such monitoring will be established by the Executive Officer.

## V. WHOLE EFFLUENT CHRONIC TOXICITY TESTING REQUIREMENTS

Based on reported chemical usage or other characterization of an authorized discharge, or based on receiving water monitoring or any other relevant and available information, the Executive Officer may make a determination that an authorized discharge has a reasonable potential to cause or contribute to an exceedance of an applicable water quality criterion, including applicable water quality objectives for chronic toxicity, established by the Basin or Ocean Plans. In such circumstances, the Executive Officer may require a discharger to perform whole effluent, chronic toxicity monitoring of the discharge. The presence of chronic toxicity shall be estimated as specified in *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, EPA-821/600/R-95/136; *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, EPA-600-4-91-003; *Procedures Manual for Conducting Toxicity Tests* developed by the Marine Bioassay Project, SWRCB 1996, 96-1WQ; and/or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, EPA/600/4-87-028 or subsequent editions.

Chronic toxicity measures a sub lethal effect (e.g., reduced growth or reproduction) to experimental test organisms exposed to an effluent compared to that of control organisms. The no observed effect concentration (NOEC) is the maximum tested concentration in a medium which does not cause known adverse effects upon chronic exposure in the species in question (i.e., the highest effluent concentration to which organisms are exposed in a chronic test that causes no observable adverse effects on the test organisms; or, the highest concentration of a toxicant to which the values for the observed responses are not statistically significantly different from the controls). Examples of chronic toxicity include but are not limited to measurements of toxicant effects on reproduction, growth, and sublethal effects that can include behavioral, physiological, and biochemical effects. Test results shall be reported in TUc, where  $TUc = 100/NOEC$ . For discharges authorized under the General Permit, the presence of chronic toxicity at more than 1 TUc shall trigger the Toxicity Reduction Evaluation requirements established by section VI. C. 2. a of the Order.

If the effluent is to be discharged to a marine system (e.g., salinity values in excess of 1,000 mg/L) originates, entirely or in part, from a freshwater supply, salinity of the effluent must be increased with dry ocean salts (e.g., FORTY FATHOMS<sup>®</sup>) to match salinity of the receiving water. This modified effluent shall then be tested using marine species.

Test species shall include a vertebrate, an invertebrate, and an aquatic plant. If additional testing is required or necessary after testing with three species, that subsequent monitoring may be conducted with the most sensitive specie. Three species screening phase chronic toxicity monitoring shall be conducted with the following species and approved test protocols.



**Table E-4. Approved Tests — Chronic Toxicity**

Species	Test	Tier <sup>1</sup>	Reference <sup>2</sup>
Giant kelp, <i>Macrocystis pyrifera</i>	percent germination; germ tube length	1	a, c
Red abalone, <i>Haliotis rufescens</i>	abnormal shell development	1	a, c
Oyster, <i>Crassostrea gigas</i> ; mussels, <i>Mytilus spp.</i>	abnormal shell development; percent survival	1	a, c
Urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	percent normal development	1	a, c
Urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	percent fertilization	1	a, c
Shrimp, <i>Homesimysis costata</i>	percent survival; growth	1	a, c
Shrimp, <i>Mysidopsis bahia</i>	percent survival; fecundity	2	b, d
Topsmelt, <i>Atherinops affinis</i>	larval growth rate; percent survival	1	a, c
Silverside, <i>Menidia beryllina</i>	larval growth rate; percent survival	2	b, d
<sup>1</sup> First tier methods are preferred for compliance monitoring. If first tier organisms are not available, the Discharger can use a second tier test method following approval by the Regional Water Board. <sup>2</sup> Protocol References: a. Chapman, G.A., D.L. Denton, and J.M. Lazorchak. 1995. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms. USEPA Report No. EPA/600/R-95/136. b. Klemm, D.J., G.E. Morrison, T.J. Norberg-King, W.J. Peltier, and M.A. Heber. 1994. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms. USEPA Report No. EPA-600-4-91-003. c. SWRCB 1996. Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project. 96-1WQ. d. Weber, C.I., W.B. Horning, I.I., D.J. Klemm, T.W. Nieheisel, P.A. Lewis, E.L. Robinson, J. Menkedick and F. Kessler (eds). 1998. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA/600/4-87/028. National Information Service, Springfield, VA.			

Authorized dischargers shall conduct toxicity tests using effluent dilutions of 100%, 85%, 70%, 50%, and 25%. Dilution and control waters shall be obtained from an area of the receiving water, typically upcurrent, which is unaffected by the discharge. Standard dilution water can be used, if the receiving water itself exhibits toxicity or if approved by the Regional Water Board. If the dilution water used in testing is different from the water in which the test organisms were cultured, a second control sample using culture water shall be tested.

The sensitivity of test organisms to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results.

## A. Toxicity Reporting

1. The Discharger shall include a full report of whole effluent chronic toxicity test results, with the regular monthly monitoring report and include the following information.

- a. toxicity test results,

- b. dates of sample collection and initiation of each toxicity test, and
  - c. acute and/or chronic toxicity discharge limitations (or “trigger” values).
2. Toxicity test results shall be reported according to the appropriate guidance - *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, USEPA Office of Water, EPA-821-R-02-012 (2002) or the latest edition, or *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, EPA-821-R-02-012 (2002) or subsequent editions.
  3. If the initial investigation TRE workplan is used to determine that additional (accelerated) toxicity testing is unnecessary, these results shall be submitted with the monitoring report for the month in which investigations conducted under the TRE workplan occurred.
  4. Within 14 days of receipt of test results exceeding an acute or chronic toxicity discharge limitation or monitoring “trigger”, the Discharger shall provide written notification to the Executive Officer of:
    - a. Findings of the TRE or other investigation to identify the cause(s) of toxicity,
    - b. Actions the Discharger has taken/will take, to mitigate the impact of the discharge and to prevent the recurrence of toxicity.
    - c. When corrective actions, including a TRE, have not been completed, a schedule under which corrective actions will be implemented, or the reason for not taking corrective action, if no action has been taken.

## **VI. LAND DISCHARGE MONITORING REQUIREMENTS**

This section of the standardized permit is not applicable to the General Permit.

## **VII. RECLAMATION MONITORING REQUIREMENTS**

This section of the standardized permit is not applicable to the General Permit.

## **VIII. RECEIVING WATER MONITORING REQUIREMENTS – MONITORING LOCATIONS RSW-001 AND RSW-002**

Authorized dischargers shall maintain a log and, at a frequency of at least one time per quarter, shall record visual observations of receiving water conditions at the point(s) of discharge and throughout the reach bounded by monitoring stations RSW-001 and RSW-002.

Observations shall include, but not be limited to, the presence or absence of the following conditions.

- Floating or suspended matter in the receiving water,
- Discoloration of the water,

- Bottom deposits,
- Visible films, sheens, or coatings,
- Fungi, slimes, or objectionable growths,
- Potential nuisance conditions.

Receiving water observations shall be summarized and submitted with each monitoring report. If necessary, the Executive Officer may require authorized dischargers to perform water quality monitoring and submit analytical data or photographic documentation of receiving water conditions in addition to or in lieu of visual observations.

## **IX. OTHER MONITORING REQUIREMENTS**

### **A. Exotic Species Monitoring**

Dischargers shall immediately report the presence, anywhere within their facilities, of any biota listed in California Code of Regulations, Title 14, Section 245, or referenced in part a. 8 of the same section, which is not indigenous to the Central Coast Region (exotic species). Any information shall be provided orally to the California Department of Fish and Game (CDFG) within 24 hours from the time the Discharger becomes aware of the circumstances.

The results of all internal exotic species inspections, and inspections conducted by CDFG in accordance with Aquaculture Disease Control regulations, shall be summarized in each quarterly monitoring report.

If CDFG advises the Executive Officer that exotic species are present in the receiving water as a result of the discharge, the Discharger may be required to perform an assessment of impacts to the aquatic habitat beneficial uses of the receiving water. Such an assessment may include a complete survey of all aquatic life potentially affected by the exotic species. The assessment may require an independent third party consultant. Any necessary eradication efforts shall be administered by the CDFG.

### **B. Chemical Usage**

With each monitoring report, dischargers shall submit the following information regarding the use of drugs, disinfectants, and other chemicals that may be present in discharges to surface waters.

1. Names, active ingredients, label instructions and restrictions, Material Safety Data Sheets, and amounts of all drugs, disinfectants, and other chemicals used.
2. Dates of application of drugs, disinfectants and other chemicals. For drugs, disinfectants and other chemicals used on a routine basis, the frequency of application may be reported instead of each date of application.
3. Treatment concentrations of the active ingredients, duration of treatment, whether treatment was static or flush, the amount of drugs, disinfectants and other chemicals applied in gallons or pounds, and the water flow (in cubic feet per second [CFS]) through the system for flush treatments or the volume of the system for static treatments.

4. The quantitative measure of the active ingredient, or the estimated concentration of the active ingredient in the effluent at the point of discharge to the receiving waters, determined by solving for the active ingredient (C), in micrograms per liter (µg/L), where:

$$C = (\text{treatment concentration}) \times (\text{flow in treatment area}) / (\text{flow at the point of discharge})$$

5. The flow in cfs during chemical usage at the point of discharge to the receiving waters.

## X. REPORTING REQUIREMENTS

### A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

### B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify authorized dischargers to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, dischargers shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. Dischargers shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. Dischargers shall submit monthly SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If a discharger monitors any pollutant more frequently than required by this Order, the results of that monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

**Table E-5. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On ...	Monitoring Period	SMR Due Date
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	Submit with monthly SMR
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 <sup>st</sup> day of calendar month through last day of calendar month	Submit with monthly SMR
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	Submit with next monthly SMR

4. Reporting Protocols. Dischargers shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedures established at 40 CFR 136.

Dischargers shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy ( $\pm$  a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
  - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.
5. Dischargers shall submit SMRs in accordance with the following requirements:
    - a. Dischargers shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. Dischargers are not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, Dischargers shall electronically submit the data in a tabular format as an attachment.
    - b. Dischargers shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
    - c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

Central Coast Regional Water Quality Control Board  
895 Aerovista Place, Suite 101  
San Luis Obispo, California 93401

- d. An Annual Self Monitoring Report shall be due on February 1 following each calendar year and shall include:
- All data required by this MRP for the corresponding monitoring period, including appropriate calculations to verify compliance with effluent limitations.
  - A discussion of any incident of non-compliance and corrective actions taken.

**C. Discharge Monitoring Reports (DMRs)**

1. As described in Section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify Dischargers to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, Dischargers shall submit DMRs in accordance with the requirements described below.
2. DMRs must be signed and certified as required by the standard provisions (Attachment D). Dischargers shall submit the original DMR and one copy of the DMR to the address listed below:

State Water Resources Control Board  
Discharge Monitoring Report Processing Center  
Post Office Box 671  
Sacramento, CA 95812

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated or modified cannot be accepted.

**D. Other Reports**

1. Dischargers shall report the results of any special monitoring, TREs, or other data or information that results from the Special Provisions, section VI. C, of the Order. Dischargers shall submit such reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

## ATTACHMENT F – FACT SHEET

### Table of Contents

Attachment F – Fact Sheet.....	F-3
I. Permit Information .....	F-3
II. Facility Description .....	F-3
A. Discharge Characterization.....	F-3
B. Discharge Points and Receiving Waters.....	F-4
C. Summary of Existing Requirements Under Order No. R3-2003-0076.....	F-5
D. Compliance Summary.....	F-6
E. Planned Changes .....	F-7
III. Applicable Plans, Policies, and Regulations.....	F-7
A. Legal Authorities .....	F-7
B. California Environmental Quality Act (CEQA) .....	F-7
C. State and Federal Regulations, Policies, and Plans .....	F-7
D. Impaired Water Bodies on CWA 303 (d) List .....	F-9
E. Other Plans, Policies and Regulations.....	F-9
IV. Rationale For Effluent Limitations and Discharge Specifications.....	F-10
A. Discharge Prohibitions.....	F-10
B. Technology-Based Effluent Limitations.....	F-12
1. Scope and Authority.....	F-12
2. Applicable Technology-Based Effluent Limitations .....	F-12
C. Water Quality-Based Effluent Limitations (WQBELs).....	F-14
1. Scope and Authority.....	F-14
2. Applicable Beneficial Uses and Water Quality Criteria and Objectives.....	F-15
3. Determining the Need for WQBELs .....	F-15
4. WQBEL Calculations .....	F-16
5. Whole Effluent Toxicity (WET) .....	F-16
D. Final Effluent Limitations.....	F-16
E. Interim Effluent Limitations.....	F-17
F. Land Discharge Specifications.....	F-17
G. Reclamation Specifications.....	F-17
V. Rationale for Receiving Water Limitations.....	F-17
A. Surface Water.....	F-17
B. Groundwater .....	F-17
VI. Rationale for Monitoring and Reporting Requirements.....	F-17
A. Influent Monitoring .....	F-18
B. Effluent Monitoring.....	F-18
C. WET Testing .....	F-18
D. Receiving Water Monitoring.....	F-18
E. Exotic Species Monitoring.....	F-18
F. Chemical Usage Monitoring/Reporting .....	F-18
VII. Rationale for Provisions.....	F-18
A. Standard Provisions.....	F-18
B. Special Provisions.....	F-20
1. Reopener Provisions.....	F-20

2. Special Studies and Additional Monitoring Requirements.....	F-20
3. Best Management Practices and Pollution Prevention .....	F-20
4. Construction, Operation, and Maintenance Specifications.....	F-20
5. Special Provisions for Municipal Facilities (POTWs Only) .....	F-20
6. Other Special Provisions.....	F-20
7. Compliance Schedules .....	F-21
8. Solid Waste Disposal.....	F-21
VIII. Public Participation .....	F-21
A. Notification of Interested Parties .....	F-21
B. Written Comments .....	F-21
C. Public Hearing .....	F-22
D. Waste Discharge Requirements Petitions.....	F-22
E. Information and Copying.....	F-22
F. Register of Interested Persons .....	F-23
G. Additional Information .....	F-23

### List of Tables

Table F-1. Effluent Limitations - Order No. R3-2002-0076 .....	F-5
Table F-2. Summary of Technology-Based Effluent Limitations .....	F-14



## **ATTACHMENT F – FACT SHEET**

As described in section II of the Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

### **I. PERMIT INFORMATION**

On September 20, 2002, the Regional Water Board adopted Order No. R3-2002-0076 (General NPDES Permit No. CAG993003) – *Waste Discharge Requirements / NPDES General Permit for Discharges from Aquaculture and Aquariums*. The Order included, as Attachment A, Monitoring and Reporting Program No. R3-2002-0076, which was subsequently modified on September 7, 2007. This Order reissues the General Permit, including its Monitoring and Reporting Program.

### **II. FACILITY DESCRIPTION**

#### **A. Discharge Characterization**

This Order (General Permit) is intended to authorize and regulate similar discharges from aquaculture facilities and aquariums (facilities that contain, grow, hold, or study aquatic species) to marine surface waters of the State within the Central Coast Region. There are currently five dischargers authorized by the General Permit, including two research facilities and three commercial aquaculture facilities.

The UC Davis Marine Pollution Studies Laboratory (MPSL), which conducts applied toxicology research, is authorized by the General Permit to discharge to the ocean approximately 8 miles south of Carmel along the Big Sur coast. Physical facilities at the MPSL include laboratory culture buildings, toxicity laboratories, a dishware cleaning and sample storage facility, office buildings, and a sample sorting shed. The UC Santa Cruz Institute of Marine Sciences, a marine research and education facility that uses a 1,000 gallon per minute (gpm) seawater delivery system to supply pens, pools and laboratories, is authorized by the General Permit to discharge to the ocean near Santa Cruz. The largest commercial aquaculture operation authorized to discharge by the General Permit is The Abalone Farm, Inc., which annually produces an average of 150,000 pounds of abalone in a flow-through seawater system and discharges to the ocean near Cayucos in San Luis County. Also currently authorized by the General Permit are Cultured Abalone Ltd and Silverking Oceanic Farms, Inc., which produce abalone and salmon in flow-through seawater systems in Santa Barbara and Santa Cruz Counties, respectively.

Dischargers authorized by the General Permit may use various types of production or containment facilities, which can generally be described as ponds or other static systems, flow through systems, recirculating systems, and open water (net pen) systems.

Pond systems, which are generally used for production of warm water species, are usually aerated and characterized by the lack of a continuous discharge. Infrequent discharges may occur as a result of a storm event or draining for harvest or repairs. Due to decomposition of biological material and settling of solids (feces, uneaten feed, and sediment), much of the waste from such systems becomes incorporated within the pond sediment and can be managed by minimizing disturbances of sediments, reducing drainage frequency, managing water levels, minimizing erosion in and around pond banks, feed management, and the proper use and storage of chemicals and therapeutic agents.

Flow through systems imitate the natural environment. In such systems, water, diverted from streams, wells, or the ocean enters continuously at the top of the system near the water source. In flow-through production systems, smaller, younger fish are typically held at the top of the system near the water source, which is the highest quality water. As fish grow, they can tolerate lesser quality water, and they are moved to downstream units. The most significant pollutants discharged from flow through systems are solids from uneaten feed and feces, which are primarily organic matter with high BOD and organic nitrogen and phosphorous contents. Some flow through systems use in line settling capability to treat the full flow of the facility; and others have quiescent zones which allow solids to settle for collection and transfer to offline settling basins and lagoons.

Recirculating systems utilize tanks with continuously flowing water and sidestream treatment technologies, which continuously treat a portion of the flow and return it to the production system.

Net pen and open water systems take advantage of an existing water body's circulation to wash away wastes and bring fresh water to the animals. Net pens, which are used primarily to grow stock to food size, are typically suspended from a floating structure and anchored to the sea floor, while allowing some movement with tides and currents. Uneaten feed and feces contribute solids, BOD, and nutrients directly to the water column from such systems.

The U.S. Food and Drug Administration (FDA) Center for Veterinary Medicine regulates animal drugs under the Federal Food, Drug, and Cosmetic Act (FFDCA). Extensive toxicity studies are required prior to drug approval from the FDA; however, limited data on potential environmental effects are available for some medications that are currently authorized for investigational use; and limited or no data are available characterizing the ecological significance of releases of drugs and chemicals at aquaculture facilities in the United States. The Regional Water Board recognizes, however, the general concerns with residual antibiotics and pesticides in the environment. Such residual materials may pollute receiving waters and immunize the organisms they are designed to control. These effects can be distributed well outside of the original areas of application. In addition, pesticides can impair aquatic organisms in receiving waters depending on the rates applied and the rate of breakdown of the product or of the active ingredient.

## **B. Discharge Points and Receiving Waters**

This Order authorizes only discharges to ocean waters of the Central Coast Region. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all receiving waters

of the Region. To address ocean waters, the Basin Plan incorporates by reference the *Water Quality Control Plan for Ocean Waters of California* (the Ocean Plan). Beneficial uses established by the Basin Plan and the Ocean Plan for ocean waters within the Central Coast Region are described in Section II. H of the Order.

### C. Summary of Existing Requirements Under Order No. R3-2002-0076

Order No. R3-2002-0076 included the following significant prohibitions, effluent limitations, and other requirements. .

#### *Effluent Limitations*

**Table F-1. Effluent Limitations - Order No. R3-2002-0076**

Pollutant	Units	Monthly Average	Weekly Average	Instantaneous Maximum
Oil & Grease	mg/L	25	40	75
Total Suspended Solids (TSS)	mg/L	---	---	60
Settleable Solids	mL/L/hr	1.0	1.5	3.0
Turbidity	NTUs	75	100	225
pH	s.u.	6.0 – 9.0 at all times		

#### *Discharge Prohibitions*

The following discharges were prohibited by Order No. R3-2002-0076.

- Discharges in a manner or location different than as described by an NOI.
- Discharges with a reasonable potential to cause or contribute to exceedances of applicable water quality criteria for toxic pollutants,
- Discharges that are toxic to human, animal, plant, or aquatic life.
- Discharges of radiological, chemical, or biological warfare agent or high-level radioactive waste.
- Discharges of fish pathogens identified by the State Department of Fish and Game at title 14 of the California Code of Regulations, section 245
- Discharges of malachite green fungicide.
- Discharges of sanitary wastewater.
- Discharges to Areas of Special Biological Significance.

#### *Other Requirements*

- Effluent shall be settled, screened, or filtered to minimize the discharge of waste solids.

- Dischargers shall develop and implement Best Management Practices (BMP) Plans to minimize the discharge of pollutants.
- Dischargers shall comply with Monitoring and Reporting Program R3-2002-0076, which includes monitoring requirements for facility intake water, effluent, and receiving water; reporting requirements regarding chemical and drug usage; and monitoring and notice requirements regarding exotic species.

#### D. Compliance Summary

Monitoring data for settleable solids, total suspended solids, turbidity, pH, and temperature were generally in compliance with effluent limitations in Order No. R3-2002-0076. A review of data submitted from the five facilities enrolled in Order No. R3-2002-0076 indicates the following incidents of non-compliance over the last five years. The majority of non-compliance instances are a result of reporting violations.

##### The Abalone Farm

Description	Occurrence Date
Failure to report influent samples for total suspended solids, pH, turbidity and temperature per the required frequency.	12/31/2007
Failure to report influent pH per the required frequency.	12/31/2006
Failure to report influent pH and exotic species inspections requirement per the required frequency.	9/30/2006
Failure to report influent pH; influent pH is to be monitored quarterly; discharger failed to monitor constituents per the required frequency.	3/31/2006
Suspended Solids 30-day average limit is 60mg/L and reported value is 87mg/L. Abalone tank was being cleaned at the time of sampling.	8/12/2003

##### Silverking Oceanic Farms

Description	Occurrence Date
Failure to submit influent pH, chemical usage data, exotic species monitoring and receiving water monitoring per the required frequency.	12/31/2007
Failure to submit influent pH, chemical usage data, exotic species monitoring and receiving water monitoring per the required frequency.	9/30/2007
Failure to submit influent pH per the required frequency.	6/30/2007
Failure to submit influent pH per the required frequency.	3/31/2007
Failure to submit influent pH per the required frequency.	12/31/2006
Failed to submit report by 07/30/2006	8/10/2006
Failed to submit report by 07/30/2006	7/31/2006
Failure to report influent pH, effluent dissolved oxygen, chemical usage, exotic species monitoring and receiving water monitoring.	6/30/2006
Failed to submit annual report.	1/30/2005
Discharger failed to report influent pH data for the month of June 2004.	6/30/2004
Discharger failed to report influent turbidity data for the month of June 2004.	6/30/2004

#### The Cultured Abalone

Description	Occurrence Date
Failure to submit daily flow (MGD) per the required frequency.	10/31/2007
Total suspended solids violation; permit limit of 60 mg/L; reported value of 95 mg/L.	10/18/2007
Suspended solids violation; permit limit <= 60 mg/L; reported value 100 mg/ L.	10/7/2004
Suspended solids violation; permit limit <= 60 mg/L; reported value 110mg/ L.	10/7/2004

#### Long Marine Lab

Description	Occurrence Date
Failure to report weekly effluent flow.	3/31/2008
Failure to submit annual report by 1/30/2008	12/31/2007

### E. Planned Changes

This section of the standardized permit template is not applicable to the General Permit for Discharges from Aquaculture Facilities and Aquariums.

## III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

### A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a general NPDES permit for point source discharges from aquaculture facilities and aquariums to ocean waters of the Central Coast Region. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

### B. California Environmental Quality Act (CEQA)

Pursuant to Water Code section 13389 the action to adopt waste discharge requirements (as in this action to reissue waste discharge and NPDES requirements for discharges from aquaculture facilities and aquariums) is exempt from the provisions of the CEQA, Public Resources Code sections 21100 - 21177.

### C. State and Federal Regulations, Policies, and Plans

- 1. Water Quality Control Plans.** The Regional Water Board has adopted a *Water Quality Control Plan for the Central Coast Region* (the Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation

programs and policies to achieve those objectives for receiving waters within the Region. To address ocean waters, the Basin Plan incorporates by reference the *Water Quality Control Plan for Ocean Waters of California* (the Ocean Plan).

Beneficial uses established by the Basin Plan and the Ocean Plan for the Pacific Ocean are described in section II. H of the Order.

Requirements of this Order implement the Basin Plan and Ocean Plan.

- 2. Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains the following temperature objectives for coastal waters, which may be applicable to discharges authorized by the General Permit. (Note: the Ocean Plan defines “elevated temperature waste” as waste that is discharged at a temperature higher than the natural temperature of receiving water, and it defines an “existing discharge” as one that was occurring or for which construction was started prior to the adoption of the Thermal Plan on January 7, 1971.)

*Existing Discharges to Coastal Waters*

- Elevated temperature wastes shall comply with limitations necessary to assure protection of the beneficial uses and Areas of Special Biological Significance.

*New Discharges to Coastal Waters*

- Elevated temperature wastes shall be discharged to the open ocean away from the shoreline to achieve dispersion through the vertical water column.
- Elevated temperature wastes shall be discharged at a sufficient distance from Areas of Special Biological Significance to assure the maintenance of natural temperature in these areas.
- Discharges of elevated temperature wastes shall not result in increases in the natural water temperature exceeding 4° F at the shoreline, the surface of any ocean substrate, or the ocean surface beyond 1,000 feet from the discharge system. The surface temperature limitation shall be maintained at least 50 percent of the duration of any complete tidal cycle.

Requirements of this Order implement the Thermal Plan.

- 3. California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California*, (the Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The latest amendment was adopted on April 21, 2005 and became effective on February 14, 2006. In order to protect beneficial uses of ocean waters, the Ocean Plan establishes water quality objectives and a

program of implementation. Requirements of this Order implement the Ocean Plan, which is applicable, in its entirety, to point source discharges to the ocean.

- 4. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes. [65 Fed. Reg. 24641 (April 27, 2000), codified at 40 CFR 131.21] Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000 must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- 5. Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that the existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements and incorporates by reference both the State and federal antidegradation policies.
- 9. Anti-Backsliding Requirements.** CWA Sections 402 (o) (2) and 303 (d) (4) and NPDES regulations at 40 CFR 122.44 (l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed.

#### **D. Impaired Water Bodies on CWA 303 (d) List**

CWA section 303 (d) requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all such 303 (d) - listed water bodies and pollutants, the Regional Water Board must develop and implement TMDLs (Total Maximum Daily Loads) that will specify WLAs (Waste Load Allocations) for point sources and LAs (Load Allocations) for non-point sources.

The State's 2006 303 (d) list of impaired water bodies can be found on the State Water Board website at [http://www.swrcb.ca.gov/tmdl/303d\\_lists2006approved.html](http://www.swrcb.ca.gov/tmdl/303d_lists2006approved.html).

As stated in section I. C of the Order, discharges that contain constituents for which a receiving water is listed as 303 (d) impaired (i.e., discharges that may cause further degradation) will not be considered for coverage under the General Permit and must seek coverage under an individual permit.

#### **E. Other Plans, Policies and Regulations**

- 1. Discharges of Storm Water.** For the control of storm water discharged from the sites of aquaculture facilities and aquariums authorized by the General Permit, the Order requires dischargers, if applicable, to seek authorization to discharge under

and meet the requirements of the State Water Resources Control Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS000001, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*.

#### **IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. NPDES regulations establish two principal bases for effluent limitations. At 40 CFR 122.44 (a) permits are required to include applicable technology-based limitations and standards; and at 40 CFR 122.44 (d) permits are required to include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. When numeric water quality objectives have not been established, but a discharge has the reasonable potential to cause or contribute to an excursion above a narrative criterion, WQBELs may be established using one or more of three methods described at 40 CFR 122.44 (d) - 1) WQBELs may be established using a calculated water quality criterion derived from a proposed State criterion or an explicit State policy or regulation interpreting its narrative criterion; 2) WQBELs may be established on a case-by-case basis using USEPA criteria guidance published under CWA Section 304 (a); or 3) WQBELs may be established using an indicator parameter for the pollutant of concern.

##### **A. Discharge Prohibitions**

- 1. Discharge Prohibition III. A** (Discharge of any waste at a location or in a manner different from that described in a discharger's completed NOI, or as described by the Order, is prohibited.) NPDES regulations at 40 CFR 122.28 and CWC Section 13263 (i) authorize the issuance of general NPDES permits and general waste discharge requirements to regulate categories of point sources, which involve the same or substantially similar types of operations; discharge the same type of wastes; require the same type of effluent limitations or operating conditions; require similar monitoring; and are more appropriately regulated under a General Permit rather than individual permits. The advantage to the Regional Water Board in issuing a general permit is that a group of similar dischargers can be regulated by one permit, instead of by individual permits, thereby reducing some administrative burden. Before authorization to discharge under the General Permit can be granted, however, the Regional Water Board must be assured that all authorized dischargers have similarities required by the NPDES regulations and the CWC. The Regional Water Board therefore prohibits discharges which are not discharges from aquaculture facilities and aquariums as reported by the Discharger in its NOI or as contemplated by the Regional Water Board. This prohibition is retained from the previous Order.
- 2. Discharge Prohibition III. B** (Discharges to ocean waters that cause or have the reasonable potential to cause or contribute to excursions above any numerical water quality objective contained in Table B of the Ocean Plan are prohibited). NPDES regulations at 40 CFR 122.44 (d) require the Regional Water Board to establish



effluent limitations in discharge permits for toxic pollutants which “are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard.” Because discharges from aquaculture facilities and aquariums are not expected to contain the Ocean Plan Table B pollutants at levels of concern, the tentative Order does not include effluent limitations for any of the Table B toxic pollutants. With this prohibition, the Order, therefore, prohibits discharges containing any of the Table B pollutants at levels of concern to ensure that discharges authorized by the General Permit are suitable for coverage. This prohibition is retained from the previous Order.

3. **Discharge Prohibition III. C** (Discharges containing substances in concentrations that are toxic to human, animal, plant, or aquatic life are prohibited). This prohibition is retained from the previous Order.
4. **Discharge Prohibition III. D** (Discharge of any radiological, chemical, or biological warfare agent or high level radioactive waste is prohibited). This prohibition is retained from the previous permit and restates a discharge prohibition established in section III. H of the Ocean Plan.
5. **Discharge Prohibition III. E** (Discharge of sludge by pipeline to the Ocean is prohibited. The discharge of municipal or industrial waste sludge directly to the Ocean or into a waste stream that discharges to the Ocean is prohibited. The discharge of sludge digester supernatant, without further treatment, directly to the Ocean or to a waste stream that discharges to the Ocean, is prohibited). This prohibition is retained from the previous permit and restates a discharge prohibition established in section III. H of the Ocean Plan.
6. **Discharge Prohibition III. F** (Discharge of fish pathogens identified in the California Department of Fish and Game (CDFG) Aquaculture Disease Control Regulations is prohibited). Due to a significant incident of infestation of an aquaculture facility in the Central Coast Region with the sabellid polychaete worm, including infestation of receiving waters, this prohibition is retained from the previous permit. Although the CDFG is primarily responsible for the control of exotic species in the State, through its responsibility to protect beneficial uses of receiving waters, the Regional Water Board retains this prohibition to prevent future impairment of marine waters and to assist CDFG in preventing the spread of such fish pathogens.
7. **Discharge Prohibition III. G** (Discharge of active malachite green fungicide is prohibited). Malachite green is a toxic chemical, which, in dilute form, has been used as a topical antiseptic or to treat parasites, fungal infections, and bacterial infections in fish and fish eggs. Due to significant health risks posed by this material (it is a suspected carcinogen and teratogen), this prohibition is retained from the previous permit.
8. **Discharge Prohibition III. H** (Discharge to receiving waters designated as an Area of Special Biological Significance is prohibited). This prohibition is retained from the previous permit and restates a discharge prohibition established in section III. H of the Ocean Plan.

## **B. Technology-Based Effluent Limitations**

### **1. Scope and Authority**

NPDES regulations at 40 CFR 122.44 (a) require that permits include applicable technology-based limitations and standards. Where the USEPA has not yet developed technology based standards for a particular industry or a particular pollutant, CWA Section 402 (a) (1) and USEPA regulations at 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis. When BPJ is used, the permit writer must consider specific factors outlined at 40 CFR 125.3.

There are two sources of technology-based requirements that the Regional Water Board has considered for incorporation into the General Permit. One is the *Effluent Limitations Guidelines for the Concentrated Aquatic Animal Production Point Source Category* established by USEPA at 40 CFR Part 451; and the second is Table A of the Ocean Plan, which establishes technology based requirements for conventional pollutants (suspended and settleable matter, oil and grease, turbidity, and pH) for industrial dischargers for which effluent limitations guidelines have not been established. Although a limited number of dischargers that may seek coverage under the General Permit will meet the size (production) threshold for applicability of 40 CFR Part 451, the Regional Water Board has nevertheless used BPJ to incorporate the requirements of the effluent limitations guidelines into the General Permit and made those requirements applicable to all dischargers covered by the General Permit. The Regional Water Board has also incorporated the numeric limitations of Table A of the Ocean Plan into the General Permit. Both sources of technology based requirements, which are described below, include reasonable means to control discharges from aquaculture facilities and aquariums covered by the General Permit

### **2. Applicable Technology-Based Effluent Limitations**

The technology-based requirements of the General Permit have been derived from the following two sources.

*40 CFR Part 451 - Effluent Limitations Guidelines for the Concentrated Aquatic Animal Production Point Source Category*

Notice Requirements. Dischargers must report the following information to the permitting authority.

- a. The use of an investigational new animal drug (INAD) or any extra-label drug, which may lead to the discharge of the drug to waters of the United States. This reporting is not required for an INAD or an extra-label drug that has been previously approved by the Food and Drug Administration (FDA) for a different species or disease, if it is used at or below the previously approved dose rate and involves similar conditions of use.

- b. Failure of or damage to a containment system that results in unanticipated discharges of pollutants to waters of the U.S.
- c. Spills of drugs, chemicals, or feed that result in discharges to waters of the U.S.

Best Management Practices (BMPs).

Dischargers with flow through and recirculating systems must develop and maintain a BMP Plan, which addresses the following activities.

- a. Solids control. The discharger must employ efficient feed management and feeding strategies; identify and implement procedures for routine cleaning of rearing units and off-line settling basins, and procedures to minimize any discharge of accumulated solids during the inventorying, grading, and harvesting of aquatic animals in the production system; and remove and dispose of aquatic animal mortalities on a regular basis.
- b. Materials storage. The discharger must properly store drugs, pesticides, and feed in a manner to prevent spills, and implement procedures for containing, cleaning, and disposing of any spilled material.
- c. Structural maintenance. The discharger must inspect, conduct regular maintenance of, and repair the production and wastewater treatment systems on a routine basis.
- d. Recordkeeping. The discharger must document feed amounts and numbers and weights of aquatic animals to calculate feed conversion ratios, and document the frequency of cleanings, inspections, maintenance, and repairs.
- e. Training. The discharger must train personnel in spill prevention and response and on the proper operation and cleaning of production and wastewater treatment systems.

Dischargers with net pen systems must develop and maintain a BMP Plan, which addresses the following activities.

- a. Feed management. The discharger must use efficient feed management and feeding strategies, which minimize the accumulation of uneaten food beneath the pens. Feed monitoring and management practices may include: use of real time feed monitoring, monitoring of sediment quality beneath the pens, capture of waste feed and feces, or other good husbandry practices.
- b. Waste collection and disposal. The discharger must collect, return to shore, and properly dispose of all feed bags, packaging materials, waste rope and netting.
- c. Feed management. The discharger must minimize any discharge associated with the transport or harvesting of aquatic animals.
- d. Transport or harvest discharge. The discharger must minimize any discharge associated with the transport or harvesting of aquatic animals.

- e. Carcass removal. The discharger must remove and dispose of aquatic animal mortalities on a regular basis.
- f. Materials storage. The discharger must properly store drugs, pesticides, and feed in a manner to prevent spills, and implement procedures for containing, cleaning, and disposing of any spilled material.
- g. Maintenance. The discharger must inspect, conduct regular maintenance of, and repair the production and wastewater treatment systems on a routine basis.
- h. Recordkeeping. The discharger must document feed amounts and numbers and weights of aquatic animals to calculate feed conversion ratios, and document the frequency of net changes, inspections, and repairs.
- i. Training. The discharger must train personnel in spill prevention and response and on the proper operation and cleaning of production and wastewater treatment systems.

*Ocean Plan Table A*

**Table F-2. Summary of Technology-Based Effluent Limitations**

Pollutant	Units	Monthly Average	Weekly Average	Instantaneous Maximum
Oil & Grease	mg/L	25	40	75
Total Suspended Solids (TSS)	mg/L	---	---	60
Settleable Solids	mL/L/hr	1.0	1.5	3.0
Turbidity	NTUs	75	100	225
pH	s.u.	6.0 – 9.0 at all times		

## C. Water Quality-Based Effluent Limitations (WQBELs)

### 1. Scope and Authority

NPDES regulations at 40 CFR 122.44 (d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards, including numeric and narrative objectives within a standard.

The process for determining “reasonable potential” for discharges to cause or contribute to an exceedance of a water quality standard and for calculating WQBELs, when necessary, is intended to protect the designated uses of receiving waters as specified in the Basin and Ocean Plans, and achieve applicable water quality objectives and criteria that are contained in the Basin Plan and in other applicable State and federal rules, plans, and policies, including applicable water quality criteria from the Ocean Plan.

Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established in

accordance with the requirements of 40 CFR 122.44 (d) (1) (vi), using (1) USEPA criteria guidance under CWA section 304 (a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information.

## **2. Applicable Beneficial Uses and Water Quality Criteria and Objectives**

Beneficial uses for ocean waters of the Central Coast Region are established by the Basin Plan and Ocean Plan and are described by Section II. (Findings) H of the Order.

Water quality criteria applicable to ocean waters of the Region are also established by the Ocean Plan, which includes water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. The water quality objectives from the Ocean Plan are incorporated as receiving water limitations into this Order. In addition, Table B of the Ocean Plan contains numeric water quality objectives for 83 toxic pollutants for the protection of marine aquatic life and human health. Pursuant to NPDES regulations at 40 CFR 122.44 (d) (1), and in accordance with procedures established by the Ocean Plan (2005), the Regional Water Board must establish effluent limitations for those Table B toxic pollutants that are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above applicable water quality criteria.

## **3. Determining the Need for WQBELs**

Procedures for performing a Reasonable Potential Analysis (RPA) for ocean dischargers are described in Section III. C. and Appendix VI of the Ocean Plan. The typical procedure is a statistical method that projects an effluent data set that accounts for long term variability of pollutants in the effluent, limitations associated with sparse data sets, and uncertainty associated with censored data sets. The procedure assumes a lognormal distribution of an existing effluent data set, and compares the 95th percentile concentration, at a 95 percent confidence level, with the applicable water quality criterion from Table B of the Ocean plan. A finding of reasonable potential results when the 95th percentile concentration exceeds the applicable criterion.

When effluent data are very limited or not available, as for discharges authorized by Order No. R3-2002-0076, the Regional Water Board may decide that WQBELs are necessary after a review of such information as the facility or discharge type, solids loading, lack of dilution, potential toxic effects, fish tissue data, 303 (d) status of the receiving water, or the presence of threatened or endangered species or their critical habitat, or other information.

Due to the nature of facilities authorized to discharge under the General Permit, the Regional Water Board has determined that there is not a reasonable potential for any of the Table B toxic pollutants to be present in discharges at levels that will

cause or contribute to excursions above applicable water quality criteria. Instead, the pollutants of concern from authorized facilities include suspended and settleable solids from feeds and feces; residuals of drugs used for maintenance of animal health; and residuals of chemicals used for cleaning equipment or for maintaining or enhancing water quality conditions. Therefore, the Order does not establish WQBELs for any of the Table B toxic pollutants. The Regional Water Board has also determined that implementation of technology-based requirements will satisfactorily control other pollutants of concern in discharges from aquaculture facilities and aquariums authorized by the General Permit.

#### **4. WQBEL Calculations**

This section of the standard permit template is not applicable to the General Permit.

#### **5. Whole Effluent Toxicity (WET)**

Whole effluent toxicity (WET) limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative “no toxics in toxic amounts” criterion while implementing numeric criteria for toxicity. There are two types of WET tests - acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

Although WET (as a Table B pollutant parameter) limitations are not established by the General Permit, as described in section V of the Monitoring and Reporting Program, the Executive Officer can require a discharger to perform whole effluent chronic toxicity monitoring based on effluent or receiving water characterization or any other information that leads to a determination that an authorized discharge has a reasonable potential to cause or contribute to an exceedance of an applicable water quality criterion.

### **D. Final Effluent Limitations**

Final, technology-based and water quality-based effluent limitations established by the Order are discussed in the preceding sections of the Fact Sheet.

#### **1. Satisfaction of Anti-Backsliding Requirements**

The Order retains all numeric effluent limitations established by the previous Order and therefore satisfies applicable anti-backsliding requirements of CWA Sections 402 (o) (2) and 303 (d) (4) and NPDES regulations at 40 CFR 122.44 (l).

#### **2. Satisfaction of Antidegradation Policy**

Provisions of the Order are consistent with applicable anti-degradation policy expressed by NPDES regulations at 40 CFR 131.12 and by State Water Board Resolution No. 68-16. The Order does not authorize increases in discharge rates or

pollutant loadings, and its limitations and conditions otherwise assure maintenance of the existing quality of receiving waters.

### **3. Stringency of Requirements for Individual Pollutants**

This Order contains general technology-based requirements as well as technology-based numeric effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on TSS, settleable solids, turbidity, oil and grease, and pH. Restrictions on these pollutants, which are discussed in section IV. B of the Fact Sheet, implement the minimum, applicable federal technology-based requirements and are not more stringent than required by the CWA.

### **E. Interim Effluent Limitations**

The Order does not establish interim effluent limitations and schedules for compliance with final limitations.

### **F. Land Discharge Specifications**

This section of the standardized permit is not applicable to the General Permit.

### **G. Reclamation Specifications**

This section of the standardized permit is not applicable to the General Permit.

## **V. RATIONALE FOR RECEIVING WATER LIMITATIONS**

### **A. Surface Water**

Receiving water quality is a result of many factors, some unrelated to the discharge. This Order considers these factors and is designed to minimize the influence of the discharge on the receiving water. Receiving water limitations within the proposed Order generally include the receiving water limitations of the previous Order; however these limitations have been supplemented and modified to reflect all current water quality objectives of the Ocean Plan (2005).

### **B. Groundwater**

Groundwater limitations established by the Order include general objectives for groundwater established by the Basin Plan for the Central Coast Region.

## **VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 also authorize the Regional Water Board to require technical and monitoring reports. Rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program (MRP), which is presented as Attachment E of this Order, is presented below.

## **A. Influent Monitoring**

Influent (plant intake water) monitoring requirements established by Monitoring and Reporting Program R3-2002-0076 (as modified on September 7, 2007) are retained without modification by the Tentative Order.

## **B. Effluent Monitoring**

In general, effluent monitoring requirements established by Monitoring and Reporting Program R3-2002-0076 (as modified on September 7, 2007) are retained by the Tentative Order.

## **C. WET Testing**

Whole effluent toxicity (WET) monitoring requirements help to assure protection of receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period, and chronic toxicity testing is conducted over a longer period of time and may measure mortality, reproduction, and/or growth. This Order retains monitoring requirements for chronic toxicity from the previous permit.

## **D. Receiving Water Monitoring**

Receiving water monitoring requirements established by Monitoring and Reporting Program R3-2002-0076 (as modified on September 7, 2007) are retained without modification by the Tentative Order.

## **E. Exotic Species Monitoring**

Exotic species monitoring requirements, established by Monitoring and Reporting Program R3-2002-0076 (as modified on September 7, 2007), are retained without modification by the Tentative Order.

## **F. Chemical Usage Monitoring/Reporting**

Chemical usage monitoring and reporting requirements, established by Monitoring and Reporting Program R3-2002-0076 (as modified on September 7, 2007), are retained without modification by the Tentative Order.

# **VII. RATIONALE FOR PROVISIONS**

## **A. Standard Provisions**

- 1. Federal and Central Coast Standard Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D to the Order.

NPDES regulations at 40 CFR 122.41 (a) (1) and (b - n) establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the



permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR 123.25 (a) (12) allows the State to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41 (j) (5) and (k) (2), because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387 (e).

## **2. Application (Notice of Intent) Requirements**

In accordance with NPDES regulations at 40 CFR 122.28 (b) (2), dischargers seeking coverage to discharge under the terms of the General Permit must submit a Notice of Intent (NOI) to be covered.

### *Deadline for Submission*

The deadlines for new and existing dischargers for submitting applications for coverage under the General Permit are retained from Order No. R3-2002-0076.

### *Regional Water Board Authorization*

Dischargers who fail to submit a complete NOI in accordance with the terms of the General Permit cannot gain or retain coverage to discharge and will be subject to all penalties allowable pursuant to the Clean Water Act and the California Water Code. NOIs will be reviewed by the Regional Water Board staff to determine suitability for coverage under the General Permit, and authorization will be granted at the discretion of the Regional Water Board.

Pursuant to NPDES regulations at 40 CFR 122.28 (b) (2) (vi), the Regional Water Board may authorize a discharger to discharge under the General Permit even if it has not submitted an NOI. This provision is not intended to relieve a discharger of its obligation to submit an NOI. Instead, it is a means with which the Regional Water Board can require a discharger, who has not submitted an NOI, to operate in accordance with the terms of the General Permit.

### *NOI Content*

An NOI form, acceptable to the Regional Water Board, is included as Attachment B of this Order. This form is intended to provide Regional Water Board staff with the information necessary for a determination of suitability for coverage or continued coverage under the General Permit. The information required to complete the NOI meets the requirements for NOIs established at 40 CFR 122.28 (b) (2), and satisfies the requirements for a Report of Waste Discharge established by CWC section 13260, and substitutes for State Water Board Form 200 (General Information Form for Waste Discharge Requirements or NPDES Permits).

## **B. Special Provisions**

### **1. Reopener Provisions**

The Order may be modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include appropriate conditions or limits based on newly available information, or to implement any, new State water quality objectives that are approved by the USEPA. As effluent is further characterized through additional monitoring, and if a need for additional effluent limitations becomes apparent after additional effluent characterization, the Order will be reopened to incorporate such limitations.

### **2. Special Studies and Additional Monitoring Requirements**

#### **a. Toxicity Reduction Requirements**

The requirement to maintain a Toxicity Reduction Work Plan is retained from Order No. R3-2002-0076. When toxicity monitoring measures acute toxicity in the effluent above the limitation established by the Order, the Discharger is required to resample and retest, if the discharge is continuing. When all monitoring results are available, the Executive Officer can determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation (TRE) requirements, or whether other measures are warranted.

### **3. Best Management Practices and Pollution Prevention**

In accordance with NPDES regulations at 40 CFR 122.44 (k) the General Permit places emphasis on the use of best management practices to control the discharge of pollutants from authorized facilities. A requirement to develop and implement a BMP Plan is retained from Order No. R3-2002-0076 and remains an enforceable condition of the permit. The specific BMPs identified in and required by section VI. C. 3. c of the General Permit are those required by the *Effluent Limitations Guidelines for the Concentrated Aquatic Animal Production Point Source Category*, established by USEPA at 40 CFR Part 451. The Regional Water Board has determined that implementation of these BMPs, by all authorized dischargers, is a reasonable mechanism for the control of pollutants discharged from aquaculture facilities and aquariums in the Region.

### **4. Construction, Operation, and Maintenance Specifications**

This section of the standardized permit template is not applicable.

### **5. Special Provisions for Municipal Facilities (POTWs Only)**

This section of the standardized permit is not applicable to the General Permit.

### **6. Other Special Provisions**

#### **a. Discharges of Storm Water**

The Order does not address discharges of storm water from the physical sites of aquaculture facilities and aquariums. If applicable, authorized dischargers must seek coverage and comply with General Permit No. CAS000001 - *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities*.

**b. Notice Requirements.**

The General Permit establishes notice requirements, which reflect requirements of the *Effluent Limitations Guidelines for the Concentrated Aquatic Animal Production Point Source Category*, and which are triggered by the use of certain drugs in authorized facilities and by incidents of structural failure and spills that may result in a significant discharge of pollutants to receiving waters.

**7. Compliance Schedules**

The order does not establish interim effluent limitations and schedules of compliance with final limitations.

**8. Solid Waste Disposal**

The General Permit requires enrollees ensure that collected screenings, sludges, and other solids removed from liquid wastes be disposed in a manner consistent with Title 27 of the California Code of Regulations (CCR) and approved by the Executive Officer.

**VIII. PUBLIC PARTICIPATION**

The Central Coast Regional Water Quality Control Board is considering the issuance of waste discharge requirements (WDRs) that will serve as a general National Pollutant Discharge Elimination System (NPDES) permit for discharges from aquaculture facilities and aquariums. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

**A. Notification of Interested Parties**

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations.

**B. Written Comments**

Regional Water Board staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address above on the cover page of this Order.

Written comments are due by 5:00 pm on September 29, 2008. Comments submitted after that date may not be accepted into the record. Late comments will not be accepted into the record if it would prejudice any party or the Regional Water Board. To receive a full response from the Regional Water Board staff and to be considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on September 29, 2008.

### **C. Public Hearing**

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: **December 4-5, 2008**  
Time: **8:30 am**  
Location: **Regional Water Quality Control Board  
Central Coast Region 3  
895 Aerovista Place - Suite 101  
San Luis Obispo, CA 93401**

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. The Regional Water Board's Web address is <http://www.waterboards.ca.gov/centralcoast/> where you can access the current agenda for changes in dates and locations.

### **D. Waste Discharge Requirements Petitions**

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

### **E. Information and Copying**

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:00 a.m. and 5:00 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (805) 549-3147.

## **F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

## **G. Additional Information**

Requests for additional information or questions regarding this Order should be directed to Ryan Lodge at (805) 549-3506 or [rlodge@waterboards.ca.gov](mailto:rlodge@waterboards.ca.gov).

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